New Orleans Medical
and
Surgical Journal

Vol. 77 SEPTEMBER, 1924 No. 3

THE PHYSICIAN'S RESPONSIBILITY TO THE PATIENT IN A DIAGNOSTIC WAY.*

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During the past few years we have witnessed some decided innovations in the practice of medicine. Less than a decade ago, the family doctor who announced himself as physician and surgeon, was, in a great many families, the only medical authority consulted from birth to the final dropping of the curtain, and then only in case of absolute necessity. It is possible that the medical practitioner of forty or fifty years ago would today be considered very poorly prepared for the practice of medicine. His preliminary education and undergraduate training would not admit him to examination before a single state examining board today. His text books are long since obsolete. Laboratories, if they existed at all, were very crude in the great majority of schools and with medical practice lacking practically all the refinements which today we feel are absolutely essential to accurate diagnosis, we marvel at the success apparently attending his efforts. Is it not possible that he may have developed almost of necessity, because of his close association with his patients, a certain clinical sense, which in these days when the physician has at his hand so many diagnostic aids, may be largely lacking—at any rate the record of the profession during those days is one which we can look to with pride. He was the pioneer of scientific medicine and I am sure improved his opportunities for advancement equally as well as do we of today. His life was one of hardships; he was constantly on call day and night. The automobile and good roads were not yet known and much of his time was spent traveling from patient to patient, and his mode of conveyance was not usually a comfortable one, in decided contrast with the comfortable means of conveyance provided for the physician of today if he be willing to render service outside the hospital or his office. His opportunities for educating his clientele were limited as his time was fully occupied with the sick, though no doubt he made such suggestions as circumstances would permit in the way of improvement in health conditions in the families under his care, but that he considered this as incidental is evidenced by his refusing to render a bill unless the patient received some medicine or at least a prescription.

Gradually the idea that the family physician was not able to cover the entire field of medicine began to impress the profession. Men began to limit their practice to general medicine or surgery. Others limited their work to the eye, ear, nose and throat, others to obstetrics, and recently the number specializing in some definite field of medicine has increased very rapidly. The result has been that the old type of family physician, except in the more sparsely settled sections of the country, has become almost extinct. Along with the specialization and restriction of medical effort to more specific lines has come the tendency to centralization—several men working along different lines locating their offices in the same building in order to have ready access to each other's offices. Others have gone farther and associated themselves together financially in one group or clinic with the same idea, that in so doing they would be in better condition to render satisfactory service to the patient. In other words, they appreciated that no one man is able today to render efficient service in all lines of medicine, and that if the patient is to be properly studied, it must be frequently at the hands of several men working along different lines. The internist may announce that he is limiting his work to diagnosis, but no competent internist

*Read before the Mississippi State Medical Association, Jackson, May, 13-14, 1924.

would be willing to discard the help of the eye specialist in certain cases; in others he needs the dental surgeon; very frequently he needs the Roentgenologist, in other cases the surgeon, or the orthopedist, and many others might be mentioned, all of which goes to show the rapid evolution of medical diagnosis during the past few years.

Coincident with this decided advance in the profession, the laity has been awakening to the value of health as an asset. Formerly, their physician was consulted only when they were ill. The idea of a thorough physical inventory is comparatively recent, and has resulted largely from the education obtained from the lay press, popular lectures, etc. The great percentage of unfitness discovered in the examination of our young men during the late war awakened many. "About four million male persons between the ages of 18 and 42 were examined. The resulting figures of defects serve as an index to the condition of the whole country, bearing in mind that they apply only to men in the prime of life. Of 3,764,000 in the first and second draft, 555,000 were rejected as entirely unfit for service. Of about two million seven hundred thousand called to service, 47 per cent had physical impairments, a figure which Dr. E. L. Fisk believes is much too low."

Further, the nutritional workers, going into our schools find from 50 to 80 per cent of our children below par physically. And the children from the homes of wealth are as bad off as those from the tenements! Let me also call your attention to the results of the observations of one of our large life insurance companies who since 1911 has been carrying on a campaign in an endeavor to lengthen the life of its policyholders. They report their results with a class of individuals who live "under an industrial strain and economic pressure likely to render its members more susceptible to disease. To spread health knowledge among its policyholders this company has prepared and distributed booklets and pamphlets giving instruction in hygiene, suggestions for the care of children and advice for the prevention of disease. The total distribution to January 1, 1924, was 306,000,000 pieces of literature." A visiting nurse service was provided, covering more than 4,000 cities and towns and providing for the care of their policyholders when ill. To December 1, 1923, a total of 18,932,224 visits had been made. This program was supplemented by the company's local health exhibits, "clean-up," safety, pure milk and other health campaigns, and the making of health and sanitary surveys. They report that "measured in terms of lives, the improvement in industrial mortality in 1923 over 1911 means a saving of 52,600 lives; measured in terms of dollars and cents, it means a saving of $12,680,000 in death claims in 1923 alone."

In comparing the figures of 1911 with those of 1923, it was found that there were 52,600 fewer deaths for all causes in 1923, 16,600 fewer deaths from tuberculosis, the death rate falling twice as fast in industrial department as in the United States Registration Area, 3,600 fewer deaths from influenza and pneumonia, 1,900 fewer deaths from heart diseases, 2,700 fewer deaths from chronic nephritis, and 2,600 fewer deaths from typhoid. The increase noted in the death rate was from automobile accidents and cancer.

A careful survey of the records of 5,987 persons examined during the first two years has been made and some remarkable facts brought out. Whereas in five years 412 of these persons should have died according to the American Experience Table, actually only 217 died. In other words, the death rate of this selected group of nearly six thousand persons who thought enough of their physical welfare to have a health examination was only 53 per cent of the American Experience Table and 72 per cent of the American Men Table. In one year those examined showed a mortality of only 39 per cent of the American Experience Table, while ordinary policyholders showed a rate of 70 per cent. The company estimates that on this venture it returned the money invested in the examinations (which were free to policyholders) and made a profit of 200 per cent in five years: Another fact brought out was that unless the examinations were regularly repeated, the beneficial effect wore off in about five years."

As a profession we have been reticent in educating the public as to the advantage of careful medical investigation at frequent intervals. We are not free from criticism when members of families which have looked to us as the medical advisor, lose their lives, 5, 10, 15 or 25 years earlier than was necessary if they had been carefully studied and such advice given at the proper time as would have prevented their too early demise. How many business men develop Arteriosclerosis and Arterial Hypertension with a resultant apoplexy, which might have been avoided had the individual been under observation regularly for some years previous and had been prop-

erly educated in matters of health. The same might be said with reference to a large number of troubles of organic character that are the chief causes of death after 45. In practically all of these troubles, with careful medical supervision and the patient educated as to his physical limitations, his life might have been prolonged many years.

This it seems is the situation which our profession faces. In many ways the laity is being educated as to the advantage of such a regime. We must now inquire if we are prepared to assume our responsibility. I mentioned earlier the formation of medical groups or clinics which it seems is a necessity if we are to meet our responsibility to the public. It is not my purpose to advocate group practice with a common financial arrangement. This may or may not be advantageous, but I would advise the association of men of different specialties locating themselves in a convenient way in order that the patient may be referred to without great inconvenience as his case may demand. There must be freedom from personal jealousies and such professional confidence as will permit the patient to receive the greatest possible good.

The expense to the patient of such an arrangement should be determined by the amount of service rendered and his ability to pay. With very few exceptions the members of our professions are always underpaid. The laity must be educated as to the value of health as an asset in life. A man that would gladly spend $500 in having his car overhauled would feel that he was being robbed if he paid $50 for an examination which might mean many years of life or the absence of suffering, which could not be properly measured in a financial way. We are to blame for not educating our clientele somewhat as to the value of our service. Too frequently we criticise a fellow practitioner who has received a seeming large fee without first knowing how much time he has devoted to the case or what it may mean to the patient. There is no profession where the members have to spend so many years and with such a financial outlay, as the medical profession, and probably of all the professions we are the most poorly paid. Let us have more interest in the welfare of the profession as a whole and in so doing we will be relieved of petty jealousies and will establish ourselves much higher in the public esteem.

DISCUSSION

Dr. G. Y. Gillespie, Jr. (Greenwood): I feel sure that I express the sentiments of every member of this association when I say that Dr. Eggleston's paper was interesting and enjoyable. He has sounded the keynote of the medical man's idea of the Utopia of medicine when he places the responsibility for an accurate diagnosis upon the shoulders of the physician. In discussing this paper I can only praise it and concur in what the doctor has said and demonstrated to us.

Man was born to die. Sickness and death have always been with him, so he has a preconceived fatalistic viewpoint that has aided the sorcerer in the past and helps the charlatan and quack today. The science of medicine through investigation and study has built up piece by piece through the ages a definite structure of fact. We know that to be true. The oldest profession in the world is that of sorcerer, or man of magic, that specialized in the protection of his fellowman from the terrors of the unknown. We know that medicine is now progressing by leaps and bounds. The doctor has always been the teacher as well as the healer, and today his duties as teacher are manifold because in the hearts and minds and lives of men disease is being recognized as a series of phenomena subject to natural and discoverable laws to be dealt with by the practitioners of medicine.

Medicine has made wonderful progress; it has undergone an evolution and is progressing toward an exact science. The human body is the masterpiece of creation, it is perfect in its normal functions; but we must recognize the fact that it is subject to pathological and abnormal changes due to environment and circumstances. Since that is true it has been the aim and goal of the man of medicine to recognize and point out to the individual these abnormal and pathological changes, and this, my friends, is the basis and foundation of diagnosis. This is the reason the physician is responsible to the patient for accurate diagnosis of his condition.

Research and study have revealed the intricacies and complexities of the normal and abnormal functionings of the human mechanism to such an extent that the practitioner of medicine today is unable to cope with the progress that is being made and to thoroughly understand all of these things, and it is out of this, that specialism has, of necessity, been born. The specialist has refined methods of diagnosis that enables him to point out to the attending physician definite reasons why the human body is abnormal in its functioning, and the general practitioner that recognizes the specialists' refined methods of diagnosis is not to be condemned, but should be praised. It is to his credit that he will send his patient to a specialist for definite diagnosis of abnormal conditions.

In medicine I am an optimist. I believe that the medical man has almost solved the problem of health, and I feel that the time is not far distant when medical men, grouping themselves together, will be able to tell a man when he is normal and when he is abnormal.

Dr. P. W. Rowland (Oxford): I want to express my very great pleasure, as a member of this association, and personally, in the presence of Dr. Eggleston, especially, because for ten consecutive years I was a patient of his, and I do not think he ever found anything wrong with me. If he ever made a diagnosis I do not know just now what it was. I know, however, that he said there was no diagnosis to be made, and that is just about as good a diagnosis as one could wish.

I am also peculiarly pleased because my asso-

ciation with Dr. Eggleston during these ten years has been one of the delights of my life. He is not only a splendid diagnostician in the usual sense, using laboratory tests and refinements, but he has a sixth sense in diagnosis. He has it in a pronounced degree. I do not know how to express it except in this way—a psychological insight into the reaction of a patient to given stimuli. That is rather indefinite—I hope you understand what I mean. Perhaps I can best illustrate it in this way: If I were a professor of medicine in an institution in this day and time I should take my students to the wards of a hospital and I should say to them, "Here are sick people, men and women. I do not care anything about the particular diagnosis you make now. Here is a sick person, and I want you to spend five minutes in conversation with this sick person. It does not make any difference what you talk to him about, but draw him out and find out how he reacts to your questions, to the stimulus you put to him, and then I want you to tell me your conclusions as to the reactions of that individual patient." I say if I were teaching young men in medicine today I should adopt that as a regular routine, without any reference to treatment, without any reference to the X-ray or the laboratory—I am not decrying these things, but I am emphasizing the psychological points in which Dr. Eggleston is trained in the highest degree, and which, without question, will frequently lead us to a diagnosis that otherwise we are unable to make—an acute insight into the character of a man's reaction in the presence of disease and abnormality—how one patient will react in one way, and another patient in another way.

I am sorry we have not longer to discuss this question, but I want again to express my great appreciation of Dr. Eggleston's presence and of his paper.

Dr. Seale Harris (Birmingham, Ala.): Regarding the various points in diagnosis which Dr. Eggleston brought out, I think the most important and essential thing in every case is to make a thorough examination of the patient and an accurate diagnosis, and this cannot be done in a few minutes. The patient must be studied over a period of several days. One of the most important things in diagnosis, in my judgment, is the history of the patient. I think 75 per cent of cases of duodenal ulcer can be diagnosed without the X-ray. Do not misunderstand me—I think the X-ray should be used where it is possible. Another thing in the diagnosis of duodenal ulcer, if the patient is put to bed and placed on a modified Lenhart diet, the symptoms will subside. The doctor brought out the point that frequently appendicitis is diagnosed as duodenal ulcer. We went over our cases of gastric and duodenal ulcers some years ago and found that according to the history more than 40 per cent had had their appendices removed, some with temporary relief and some with no relief at all. The fact of the matter was these people had ulcer all the time. On the contrary, last week at the meeting of the American Gastroenterological Association there was a paper read showing that a chronic appendix often stimulates an ulcer, and Dr. Heyd of New York mentioned a number of cases. We have had several cases where we felt the diagnosis was probably duodenal ulcer, and when an X-ray was made it showed adhesions around the caecum and on operation a chronic appendix was found.

One thing I would like to call to the attention of the surgeon, and that is in the case of a patient with a chronic abdominal condition in operating it is advisable to make an incision long enough not only to examine the appendix, but also the gall bladder and duodenum. It will not infrequently be found that a patient has appendicitis and also a duodenal ulcer. At this meeting of which I have spoken there was a paper read showing the relationship of appendicitis to duodenal ulcer and gall bladder infections and showing how the infection may be carried not only through the blood stream, but by the lymphatics, and that not infrequently we find chronic appendicitis with ulcer and gall bladder disease in the same patients.

It is important to take everything into consideration—not stop merely at diagnosis, but teach the patient how to live to keep up his resistance. In ulcer cases look out for focal infections, study the patient carefully and have him report back every month for a year for further observation and advice.

Dr. E. L. Eggleston (Battle Creek): I appreciate the kind discussion of this paper very much.

I did not intend to say there is no such thing as chronic appendicitis. Forty per cent of Dr. Harris' cases of duodenal ulcer had been diagnosed chronic appendicitis and operated without relief. That is exactly what I wanted to convey to you, that the possibility of error is very great when we make a diagnosis of chronic appendicitis in vague abdominal disorders. And I would say further if you are the internist on a case and it goes to a surgeon, for chronic appendicitis, do not allow him to make an incision an inch and a half long, but insist that he make an incision long enough to explore thoroughly the right upper quadrant when he takes out what he thinks is a chronic diseased appendix.

THE MANAGEMENT OF THE THIRD STAGE OF LABOR.*

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NEW ORLEANS,

The third stage of labor, that time which elapses from the birth of the child until the delivery of the placenta and membrane, a time, during which, according to De Lee, more mistakes are made than in the first and second stages combined.

I feel a hesitancy in bringing before you that, which upon first thought, may be considered a muchly worn-out and over-written subject; but when we refer to the above definition, viz—"from the birth of the child until the birth of the placenta," we see that we are covering a period in the management of a case of labor of from a few minutes to the extreme of twenty-four hours. It is indeed a period replete with many dangers, and at times requiring rare obstetric judgment and surgical skill.

In considering the third stage of labor,

*Read before the Orleans Parish Medical Society, April 28th, 1924.

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we shall deal not alone with the technique and methods of delivery of the placenta, but also with the management of late intrapartal hemorrhage, and with lacerations and their repair, because lacerations are, as a rule, repaired immediately, or at least should be while one is waiting for the birth of the placenta, or just afterwards.

Mechanism of Separation of the Placenta

You are all, no doubt, perfectly acquainted with the mechanism of the separation of the placenta. Perhaps the best study on this subject is by Commandiet and Chapuis, an abstract of which follows: "The mere retraction of the uterus after birth of the child is not the cause of placental separation. The separation is due entirely to those contractions of the uterus which reappear after the period of physiologic inertia. The first effect is to increase the thickness of the uterine muscle, producing an all-around diminution of the surface of the placental insertion and a considerable thickening of the placenta itself, as well as of the decidua serrotina. This makes evident the presence of lacunae in the decidua. The chronic villi are stretched, and the traction exercised by them on the compact layer of the decidua is transmitted to the partitions of the interlacunar spaces, resulting in a rupture of these. The union of several lacunae constitute a first zone of separation where blood accumulates. This retroplacental hematoma increases at the same time as the process of separation and contributes to its extension, as the accumulated blood tends to escape toward the periphery of the zone of separation."

The fact that separation has taken place can easily be recognized; first, the fundus of the uterus is ridge-shaped and not spherical; second, by Küstner's sign, the drawing back of the cord after pressure from above when the placenta is still attached and that it does not move if the placenta is separated; and, third, by Strassman's sign.

The placenta as a rule comes away in less than thirty minutes. Now most methods advanced for assisting this normal, physiological process have for their basis the saving of time. Haste during the third stage of labor is one of the prime causes of postpartal hemorrhage and a stormy puerperum. In fact, Rossier states the average loss of blood after spontaneous delivery, or the use of the piston method (see below) is about 280 gm., on the use of the Crede method is 577 gm.

The most commonly employed method of expressing the placenta is that described by Crede in 1853. It consists in grasping the uterus firmly between the fingers posteriorly and the thumb anteriorly, making firm pressure downward in the axis of the superior strait. In accomplishing a true Crede expression, the accoucher is employing great force with a resulting traumatization of the uterus. Many believe that in making a small amount of pressure on the fundus of the uterus they are doing a true Crede expression, whereas they are merely using the uterus as a piston to express the already separated placenta.

In reviewing the literature on the subject of expulsion of the placenta, one finds that some advise "traction on the cord, using as much traction as it will permit without damage." This is mentioned only to condemn it, and I wish to report a case of inverted uterus resulting from traction on the cord and pressure on the fundus combined.

Case: Mrs. X. Primipara; white; age 22. The baby was born at about 10 a. m. Labor normal; no lacerations; no hemorrhage. The midwife in attendance after waiting some ten to fifteen minutes for the placenta to deliver, attempted to do a Crede expression, at the same time making traction on the cord. As a result, the uterus inverted completely. A hurried call was sent to Touro Infirmary for assistance. The patient was found to be in a state of profound shock, and we immediately called for the ambulance. In the meantime the patient was given a 1-4 gr. of morphia and under light ether anesthesia, an attempt was made to replace the uterus. Failing, the patient was removed to Touro, dying just upon arrival at the institution.

Dantin reports two similar cases, both resulting in death from shock. He adds that traction on the cord and the Crede Maneuvers are now generally condemned in France.

The injection of the umbilical vein with some sterile solution has been resorted to in cases of retained placenta in an effort to favor separation. This method seems to have been introduced by Monjon in the early part of the 19th Century.

Pituitrin in the Third Stage of Labor

If all the pituitrin used during the second stage of labor were saved to be used during the third stage, or immediately thereafter, there would be fewer still births and lacerations.

Obstetricians who use pituitrin are about equally divided as to the advisability of using it before the birth of the placenta or immediately thereafter. S. Seides reports 500 cases in which 0.5 c. c. of pituitrin was given at the beginning of the third stage. He reports that the loss of blood was surprisingly small and that its use considerably shortened the third stage. He also

claims that it makes Crede's manual expression of the placenta entirely unnecessary.

On the other hand, Reist and Guggenheim, acting upon the glowing reports as given out by Seides, conducted two series of 100 cases each, in order to determine the value of pituitrin and pituglandol given at the beginning of the third stage of labor. Both these series were compared with a series of 100 cases without the injection and, as a result, *they have rejected the drug for the prophylactic use.* They contend that the time of separation of the placenta was not shortened and that the average loss of blood during the placental period was not markedly decreased.

Retention and Adherence of the Placenta

The improper treatment of these two conditions is the cause of many of the unfortunate sequels of the third stage of labor. A retained placenta is one that is not delivered within the first twenty to thirty minutes following delivery of the child. An adherent placenta, otherwise termed placenta accreta, is one that is due to an atrophy or absence of the normal uterine decidua, as a result of which, the trophast erodes directly into the uterine musculature, leaving no line of cleavage.

The former condition, if handled properly, need not cause any serious trouble. The treatment, which we employ on the Obstetrical service of the Touro Infirmary, and which has given us excellent results, is purely an expectant one. If the placenta does not come away in the average length of time, and then fails to do so in spite of the hypodermic administration of pituitrin and an attempt at Crede expression, we simply adopt the attitude of watchful waiting—waiting and watching for hemorrhage alone. Never, unless there is bleeding, do we invade the uterine cavity in order to manually remove the placenta. This maneuver is one fraught with many dangers, chief among which are perforation of the uterus, and post-partal infection. In a series of 483 cases delivered on Obstetrical service of Touro, during a period of six months, there were five cases of retained placenta, or a little over 1 per cent. One was expressed by moderate pressure after six hours, two after twelve hours, one after twenty-four hours and one after waiting thirty hours! In not one of these cases was there a febrile reaction.

Goethals, who made a detailed review of the subject at the Boston Lying-In Hospital, gives the following figures: In 8,182 hospital deliveries the placenta was manually removed in 170 cases, with a corrected mortality of 1.76 per cent. Among the outpatient cases there were 60 in which the placenta was removed manually. One out of every four cases showed some degree of post-partal uterine infection. (In the absence of hemorrhage, I frankly believe that I would much rather take my chances with the method of the old negro granny—viz: allowing the patient to blow into a bottle, than to insert my hand into the uterine cavity under 24 hours.)

Additional figures are those of Pfloeger, who reports 174 cases of manual extraction with a morbidity of 43 per cent; Rosenthal, 39 cases with a 66 per cent morbidity, and Seiffarth, 79 cases with a 35 per cent morbidity.

Adherent placenta, or placenta accreta, is a very rare condition, occurring, according to Polak, in one out of six thousand cases. The differential diagnosis between this condition and retained placenta is as follows: After a partial or complete separation of a retained placenta there is a certain amount of uterine bleeding; there is descent of the cord and the characteristic ball-like condition of the fundus. In placenta accreta, entirely attached, none of the above signs are present and the fundus assumes a characteristic shape, being broader from side to side. The treatment of this condition is, again quoting Polak, an aseptic exploration of the uterus under anesthesia; determining the absence of a line of cleavage; hysterectomy should be done.

Lacerations and Their Repair

Lacerations during labor are much more frequent than we are given to suppose. The fact is, that many first degree injuries are not recognized as such, or, are overlooked. According to Harrar, a laceration of some type occurs in 45 per cent of the primparous labors at the New York Lying-In Hospital.

But why consider lacerations in a paper discussing the third stage of labor? Simply because the examination for and the repair of lacerations is an integral part of that time. For it is while waiting for the placenta to separate, that we make our examination and do our repairs. Might the suggestion not be ventured that this time is well spent if for no reason other than causing us not to attempt a too early expression of the placenta.

Lacerations should be repaired at once, even those extending through the sphinc-

ter. William makes this statement, "No matter what the degree, the immediate closure of perineal lacerations by suture is urgently indicated."

Hemorrhage

Hemorrhage during the third stage of labor may be due to either of two causes, viz: partial separation of the placenta, or lacerations.

Bleeding from a partially separated placenta is due to difficulties in the complete separation of the placenta, whereby the uteroplacental vessels in the detached area are open and give rise to hemorrhage. According to Opitz, various conditions may cause defective separation of the placenta; unusual thinness or want of uniformity of the placenta; pathological changes in the placenta, and deficient contractibility of the uterus. To these may be added the too early attempt of a manual expression of the placenta.

The treatment of hemorrhage consists in the administration of pituitrin and the vigorous kneading of the fundus, attempting to express the partially separated placenta. Should these methods fail, it is then, and then alone, that we advise doing a manual extraction of the placenta under the very strictest aseptic precautions.

The tretament of hemorrhage due to lacerations of the pelvic floor, the anterior vaginal wall and clitoris, or the cervix, is obvious, viz, suture.

Conclusions

1. Traction should never be made on the cord. A true Crede expression should be reserved for an emergency.

2. The status of pituitrin for use during the third stage is not fully established.

3. Manual extraction of the placenta is dangerous and should not be done except as a last resort, or in the face of hemorrhage.

4. Lacerations should be repaired at once. Lacerations of the cervix should only be repaired if giving rise to hemorrhage.

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DISCUSSION

Dr. L. A. LeDoux: I want to emphasize a subject that is usually considered too lightly. After delivery the placenta acts as a foreign body; it stimulates contractions of the uterus. In addition we have the formation of a blood clot which actually separates the placenta for us. The pressure, or Crede method, should be used to expel and not to attempt to separate the placenta.

As regards manual extraction of the placenta, I do not agree with Dr. Levy, that it is a last resort measure. In our experience, the post-partum infection per cent has not been as high as 60 per cent. The reason is that we are working entirely within the membranes. I think much of the blame could be laid to faulty asepsis and technique on the part of the operator.

Dr. Edward A. Ficklen (New Orleans): I am in accord with the speaker's opinions. In addition, I believe that every effort should be made to repair cervical tears even if they are not of great severity in order to close possible avenues of infection. Certainly, injuries to the upper portion of the genital tract are more apt to give rise to trouble from infection than those lower down.

The writer spoke of the technique of repairing complete tears of the perineum. If episiotomy is done more often such tears will not occur. I have found it necessary to do prophylactic episiotomy before extraction with forceps. A clean cut in the muscle heals kindly and does less damage in the long run than forcible rupture of the levator fibres by the fetal head.

Dr. E. L. King: I wish to emphasize two or three points. The first is the question of infection following manual removal of the placenta. We have had such cases at the Charity Hospital, which were brought in from the outside. Last year we had three of them at one time, and two of these died of the infection. So you see that it is a dangerous procedure, and if the operation has to be done, we must pay strict attention to asepsis. In our work in the white Obstetrical Service we very seldom remove a placenta manually, probably once or twice a year, in 400 or 500 cases. The placenta is generally expelled spontaneously or with a little belt. We use the Crede method occasionally, and once in a while give a dose of Pituitrin to help the uterus deliver the placenta. Sometimes we have to wait, occasionally as long as an hour. I have never had occasion to wait several hours, or even a day or so, as mentioned by Dr. Levy in his paper.

One recent author, in stressing the importance of avoiding infection, proposed the following method: the hand is introduced into the uterus within the membranes (illustrating) and then the membrane-covered hand is worked in between the placenta and the uterus wall, and the placenta is peeled loose in that way.

Another point is the question of lacerations. We have had occasion, 3 days later, to go back and sew up a bleeding vessel in the crus clitoridis, which was caused, during normal delivery, by over-enthusiasm in the matter of promoting extension of the head. These antirion lacerations are frequent, and should not be overlooked.

Like, Dr. Ficklin, I believe in the use of episiotomy, when done properly, particularly in a primaparous delivery in which a tear seems to be imminent. It is also useful in breech deliveries in primiparal, in whom you may have to go up and get the arms and the head, in which case you will need plenty of room.

Dr. A. C. King: Lacerations of the anterior vaginal wall were spoken of. I am talking to the young men now. I want to warn them against too much enthusiasm in introducing needles too deeply. I have seen tears beautifully sewed up, so much so that all sutures had to be removed, on account of the rectum having been included. They followed Dr. Newman's suggestion, but went too far, and included the rectum.

Now a word about uterine inversion. About twelve years ago a Doctor reported two cases which died. Dr. Clark reported one case which did not die. I reported a case three months later which did not die. Fortunately for us.

In the Dublin Clinic, there was one case in 190,000, while Braun reports only one case in 250,000. The shock is tremendous,—partly due to hemorrhage and partly to mechanical disturbances. When these cases do not die, the patient and the physician may consider themselves lucky. In my case, the version was due to a short cord. It measured eight inches. I had read of it, but had never seen it. I was fortunate in saving the case, and did so only by prompt treatment.

Dr. Adolph Jacobs: On account of the short time allowed, Dr. Levy did not have sufficient time to go into many details. I would like to speak of the injection of physiological warm saline solution in the umbilical vein. This simple procedure first described by Asdrubali in 1826 and by Majon in 1827 was revived by Gabastou of Buenos Ayres in an article written in 1924. The medical principal of this procedure is probably based on the fact that as a reproplacental hematoma is the first cause of the placenta operation, by injecting about 200 to 400 c.c. of saline solution in the umbical vein, the placental vessels are filled, become turgescent and the capillary walls breaking, a reproplacental hydroma is formed. The placenta is then separated by the mechanical action of the hydroma and by the stimulation of the uterus by its heavy contents.

Various clinics report that the manual separation of the placenta was reduced considerably by this procedure which should be used only if there is no brisk hemorrhage.

Cases are mentioned by some writers that the placenta has been left as long as five days when there was no hemorrhage and have seen separate without manual extraction. The great trouble in dealing with a retained placenta is that one can never know until one begins extraction, whether he deals with a placenta which would peel off easily, one closely adherent that a line of cleavage is hard to find or encounter a true case of placenta accreta which altho very rare must be kept in mind because in such a case emergency measures with laparatomy and hysterectomy must be resorted to.

The question of infection following manual extraction varies I believe, a great deal with the individual obstetrician and the surroundings. One naturally would not expect a high percentage of infection in cases treated in hospitals as those that are cared for in the homes and probably managed by untrained individuals.

I agree with Dr. Levy to wait in cases where simple procedures fail or where there is no brisk hemorrhage.

Dr. W. E. Levy: I quite agree with Dr. Ledoux that the Crede method is not to be used to effect a separation of the placenta. However, I do not agree with him that manual extraction of the placenta is fairly safe. As I have already stated, it is dangerous from the standpoint of Post Partal infection, and I maintain that it is a measure of last resort.

I hardly believe that one is able to work entirely within the membranes, as Dr. Ledoux has stated.

I thoroughly agree with Dr. Ficklin that prophylactic incision is highly desirable in the prevention of tumors. In a paper read before this society three years ago, I advocated the use of the medium incision, or periniotomy, and have been following this technique with the majority of primipara that come under my care.

Dr. Ed. King, in his remarks on the danger of infection following manual extraction of placenta, has only served to emphasize what I have brought out.

I quite agree with Dr. A. C. King as regards tears of the anterior vaginal wall. I recall one case that occurred in my service at Touro Infirmary two years ago. There was a severe anterior tear extending along the lower part of the urethra. It bled rather profusely. In order to guide myself in the repair of this tear, I inserted a catheter into the urethra. This served as a guide in preventing my sutures from entering the lumen.

As regards posterior tears, I quite agree with Dr. King that there is danger of the sutures entering the rectum. Whenever I have done any deep suturing, I always insert my finger in the rectum to make sure that no sutures have penetrated into it. However, if one does, and it is not promptly removed, there is always danger of a recto-vaginal fistula.

SPHENO-PALATINE GANGLION NEURALGIA*

L. S. GAUDET, M. D.

NATCHEZ, MISS.

Spheno-Palatine Ganglion Neuralgia is not only of interest to the Eye, Ear, Nose and Throat Specialist, but of deep import to the General Practitioner as well.

More so to the General Practitioner from a diagnostic standpoint, as he usually sees these cases first, and often recognizes them least.

As is usually the case, patients so afflicted, call upon the Family Physician, who on account of the intensity and the variety of pain load them up with Opiates and Coal-Tar preparations to the utmost limit in many cases, with no improvement, and finally in many cases, the patient falls into the hands of someone who recognizes the trouble, weak, haggard, sleepless, exhausted, profoundly toxic, and it is just such a very interesting case that leads me to pay special attention to this form of suffering, and to bring this subject before you, with reports of some cases, which will follow.

And many cases come, assuming various types and forms.

Before proceeding further, it is well that

*Read before the Mississippi State Medical Association, Jackson, Aug. 13-14, 1924.

a review of the anatomy of the Spheno-Palatine Ganglion be gone into.

Shaeffer gives a good and clear description of Meckel's or the Spheno-Palatine Ganglion, which is described as a small triangular body of a reddish gray, flat on one surface, convex on the other, measuring about 6 mm. long, and 3 or 4 mm. in width.

It lies close to the Spheno-Palatine Foramen, and just beneath the Maxillary Branch, or Second division of the Fifth or Tri-Facial Nerve, lying in the Spheno Palatine Fossae.

It is therefore intimately related with the lateral wall of the Nasal Fossae, Sphenoid Sinus, and some of the posterior Ethmoid Cells, as well as being in close proximity to the Maxillary sinus.

Histologically it is made up of an interlacement of nerve fibres, and stellate nerve cell bodies.

As in other Sympathetic Ganglia of the head, the Spheno-Palatine Ganglion has three (3) so called roots which convey nerve fibres to and from the Ganglion, namely:-

1 Motor,
2 Sensory,
3 Sympathetic.

The Motor Root is described as rising from the Facial nerve in the Fallopian canal, consisting of visceral motor fibres which arise in the Medulla Oblongata, pass through the Geniculate Ganglion, and become component fibres of the Great Superficial Petrosal, and here uniting with the Sympathetic root, the Deep Petrosal, both fuse or unite to form the Vidian or nerve of the Deep Petroygoid Canal, which passes along this canal and reaches its termination in the Spheno-Palatine Ganglion by Synchronizing with the cell bodies of the Post Ganglion Neurones of the ganglion. So much for the Motor Root.

The Sympathetic Root, of the Spheno Palatine Ganglion is known as the Great Deep Petrosal Nerve, coming directly from the Carotid Plexus.

Most of the fibres are the peripheral processes of post Ganglionic neurones arising from the cell bodies located in the Superior Cervical Sympathetic Ganglion. These fibres pass through the Spheno-Palatine Ganglion uninterrupted for distribution.

The Sensory Root consists of the Spheno-Palatine nerves which are two or three short stout trunks connecting the Second Division of the Tri-Facial with the upper margin of the Ganglion proper. Most of the component fibres of these roots are dendrites of cell bodies located in the Gasserian Ganglion. These fibres for the most part, pass through or around the Spheno-Palatine Ganglion without interruption to be distributed by way of numerous branches.

Branches of the Spheno-Palatine Ganglion

Orbital or Ascending
Palatine or Descending
Pharyngeal or Dorsal
Nasal or Medial

The Orbital Branches are two or three small ascending which pass through the Inferior Orbital Fissure into the orbit. They travel trough the Posterior Ethmoid Foramen and are distributed to the Posterior Ethmoid Cells, and the Sphenoidal Sinus.

The Palatine Branches are usually divided or described under three heads:—

A—The Anterior Palatine,
B—The Middle Palatine,
C—The Posterior Palatine,

The Anterior Palatine courses through the Posterior Palatine Foramen, reaching the inferior surface of the hard Palate, and arborizes with the Naso-Palatine Nerve. It gives off a variable number of branches called Posterior Inferior Nasal branches.

The Middle Palatine Nerves pass through the small Palatine Foramen, and supply the soft palate, the Faucial Tonsils and the region in the immediate vicinity.

The *Posterior Palatine* also supplies the inferior surface of the soft palate. The Posterior Superior Nasal Branches divide themselves into two groups:—

Lateral
Medial

branches.

The *Lateral Branches* supply the mucous membrane entering into all the structure of the Dorso-Cephalic lateral wall of the Nasal Fossae.

The Medial Branches cross the dorsal portion of the roof of the Nasal Fossae and supplies the mucosa of the Septal Wall. On the Septal wall mucosa the main trunk of the Medial branches pass downward and forward as the Naso Palatine nerve to the Anterior Palatine Foramen and joins its fellow of the opposite side.

Anatomic Relations of the Spheno-Palatine Ganglion

The Pterygo-Palatine Fossae is of especial importance when considering Nasal and Para-Nasal disorders, for therein is contained the Maxillary, Vidian nerves, the

Spheno-Palatine Ganglion and its outflowing branches, three important fissures also terminate therein, *Superior Orbital, Pterygopalatine* and *Inferior Orbital,* as well as *six foramina* namely, the Sphenopalatine, Foramen Rotundum, Pterygoid canal, Pharyngeal canal, Infraorbital canal, the Pterygo-Palatine and its accessory canals, and so close to it lie the Sphenoidal and Ethmoidal cells which often enroach on it, that we thereby more than appreciate its importance.

The Respiratory Nasal mucous membrane bear intimate relation to the Spheno-Palatine Ganglion, and in most cases a thin paper thickness of bone intervenes between the Nasal cavity and the ganglion itself, which makes it very subject to surface influences from both the nasal cavity and certain para-nasal sinuses, and these surfaces are in relation to the ganglion in proportion to the size and form of the Sphenoidal Sinuses and the Posterior Ethmoid group of cells.

Etiology

The Etiology up to this time is not clear cut, but somewhat indefinite, and I have not come across very much written on this subject, but if we stop to think of what parts this ganglion and its branches supply, and the structures that lie in close proximity to the ganglion itself, plus a little thought devoted to this subject, we can find many things to advance for the etiology or cause of this condition.

To my mind, if most patients give a history of the trouble beginning with a cold, and most of them do, that come under my observation, then it is reasonable to assume that inflammatory changes that take place in the Nasal passageways, including the Ethmoid and Sphenoid Sinuses would rank as one of the leading causes, which coupled with the fact that most of my cases occur during the Winter months, would further bears out the above statement.

Again, delving into the etiology of Trifacial Neuralgia, which in a way is closely associated or related to Spheno-Palatine Neuralgia, we find there many things to advance as a cause.

Toxemias no doubt have a bearing on this disease, as Malaria, Anemia, Constipation, Syphilis, Rheumatism etc.

Appenda

Byrd, in the Eye, Ear, Nose and Throat Monthly, April 1924 gives some interesting data in the general distribution of the Terminal branches of the *Nasal Ganglia.* He likens it to a Sub-telephone exchange, with the brain as the main or great telephone exchange.

He gives the law of distribution of Meckel's Ganglion thus: *A disturbance arising at any point in Meckel's area may be transmitted to any other point, but in so doing it must pass through Meckel's Ganglion and can accordingly be blocked off at that point.*

He also states another important point, namely:—*Meckel's Ganglion has a long distance communication with the pneumogastric nerve,* but has up to now not been able to trace the exact course satisfactorily.

Let us hope that Dr. Byrd will give us more enlightening information on this interesting subject.

Dental Caries, and other pathological changes of the teeth, surely come in for their share.

Then there is the changes we find in Ethmoid and Sphenoid inflammatory processes, particularly the Posterior Ethmoids, that like the Sphenoid, lie in such close proximity to the ganglion, besides being supplied with branches from the ganglion. I would even consider recurrent attacks beginning with a cold or Coryza, as almost pathognomonic of Sinus disease.

Looking to the eye itself, we can there find certain diseases that could account for suffering in connection, and any inflammation of the Uveal tract, particularly Uveitis, Iritis and even Glaucoma, as Byrd of Florida connects the last named disease with the Spheno-Palatine Ganglion.

Erose

Symptoms:—Of course the paramount symptom is pain, just as we find in any other form of Neuralgia, but the pain in conjunction with other phenomena either simple or complex, assume a grouping which Sluder has called the Neuralgic Syndrome. From this syndrome group often time ramify other symptoms either in connection with it, or alone and called Isolated phenomena, often rather obscure, and only understood by close observation and study. These cases often present difficulties in diagnosis as we will show later on.

The usual picture of a Neuralgic Syndrome is as follows:

Patient usually complains of a previous cold, either severe or light, and following this, more or less pains, usually unilateral increasing in severity, worse at night, with

loss of sleep, little relief from medication, with a gradual lessening of pain towards morning, and the ability to sleep some during the early morning hours. This pain, patients will point out and explain, begins in the region of the eye, side of the nose, upper and lower teeth, extending to the throat and neck, into the temple, scalp, ear, mastoid region, occipital region, running down the neck, into the shoulder and arm, forearm, and even the fingers.

Most cases point to a severe point of pain located back of the Mastoid from 3 to 5 cm, and indicate this as the maximum severity. Sluder calls especial attention to this, but I have seen several cases without this.

The patient will also describe a coldness of the face, and often a numbness of the arm of the affected side. With some variations this grouping is fairly constant and with casual observations easily recognized.

Not so however, coming back to the Isolated Phenomena as mentioned a little while previous. Here we may have presentation of a symptom or symptoms which require careful observation and study and thought to draw any worthwhile conclusions.

For instance, Nausea, Vertigo, Glossodynia, Paragusia, Sneezing, Rhinorrhea, Lacrimation, Photophobia, Heminopsia, Aphasia, are often not suggestive of a nasal examination in connection with Spheno-Palatine disfunction, still treatment applied to the ganglion brings relief in many cases.

Suffice to say that about all observers have about agreed to and accepted Sluder's Classical description of the Neuralgic Syndrome.

Insofar as the isolated symptoms which come under the Sympathetic Syndrome, observers are constantly discovering and adding to the already large series of symptoms.

Sluder and Green, in the Journal of the American Medical Association of Nov. 24, 1923, page 1781 publish a comprehensive and interesting article on Functional Ciliary Hyperesthesia, and the ability to control same through cocainization of the Spheno-Palatine Ganglion. In their comments, they say that it is reasonable to infer that the great pain of Ocular disorders, Iritis, Keratitis, is transferred by some path through the Spheno-Palatine Ganglion since cocainizing the ganglion often brings relief.

More isolated symptoms may be expected to come forward as time passes on because of the interesting phenomena the study and observation brings out.

Diagnosis—So closely resembling Neuralgia when observed casually, it is more often diagnosed as such, so many times Idiopathic Neuralgia which of course is indefinite, and a more suitable name would be Ignorance Neuralgia, as we are learning more and more where there is an effect, there is a cause a little further on. Consequently Neuralgia of the Tri-facial nerve, in whole or in part often clouds the diagnosis unless well understood, and vice-versa with Nasal Ganglion Neuralgia.

Let us see:—If we can understand and diagnose Tri-facial Neuralgia. By do doing we make the diagnosis of the other easy enough, except in cases of Isolated Symptoms or Phenomena.

One of the most interesting writings on Tri-facial Neuralgia that I have had the opportunity to peruse is from the pen of Dr. Charles Metcalfe Byrnes, found in Tice's Practice, Volume 10** and with pleasure quote him because he is a Mississippi boy, and from Natchez at that.

The usual symptoms of Tri-facial Neuralgia, sudden onset without warning, pains, stabbing, darting, lightning like, which may be in the upper or lower jaw, or in one or two teeth, with intervals varying from a few days or weeks or months, with the attacks becoming worse with each paroxysm is very frequent.

The attack itself is characterized by a pain of short duration, lasting from 15 to 30 seconds, rarely one minute, and the paroxysms may run up to 40 or 50 before ceasing. Patients describe these attacks as jabs, darts, flashes, twinges etc.

The distinguishing features are short duration of pain, paroxysmal, complete relief between attacks, with sudden onset and cessation. Again, the pain always follows the anatomical distribution of the Tri-facial Nerve tract.

As peripheral irritation so frequently induces an attack, patients in indicating the area of pain, will touch the face as gently and lightly as possible with one finger or two fingers, and will shrink from the examiner.

We also find that Tri-facial-neuralgia often accompanied by Vaso-Motor disturbances as well as secretory disturbances, as excessive lacrimation, injection of Conjunctiva, nasal discharge, salivation, localized sweating etc.

The disease is nearly always unilateral, may affect the three branches, or only one of them, as in Opthalmic Neuralgia, Maxillary Neuralgia, or Mandibular Neuralgia.

The diagnosis of Tri-facial rests upon the following:

1—Usually occurs after 30 years.
2—Patient in good health as a rule,
3—Pain of short duration.
4—Complete freedom of pain between the attacks.
5—Attack often brought on by peripheral irritation.
6—The manner in which the patient indicates the pain.
7—Both in the male and female.
8—Pain worse in day time.
9—Pain along the nerve tracts.

In contradistinction to the above, in Spheno Palatine Syndrome, the cases I have seen were all female, the pain much worse at night, no peripheral sensitiveness in the degree of acuteness as in the Tri-facial form, pain not limited to the Tri-facial nerve tracts, etc.

Treatment:—The treatment instituted when the patient is first seen is the application of a solution of 20 per cent Cocain to the region of the Ganglion on the affected side, making from three to five applications, after which a 10 per cent Solution of Silver Nitrate is applied.

If the pain repeats itself, the patient returns, and the same treatment is applied. If that does not give long enough intervals of relief, I then inject the Ganglion through the Spheno-Palatine Foramen, going in through the mouth opposite the second molar, about 5 mm. towards the medium line of the hard palate, using a long enough needle to penetrate about 35 mm. I first of all use a small quantity of 1 per cent Procain Solution to inject ahead of the needle as it penetrates, and then remove the syringe, leaving the needle in position, and then inject from 5 to 10 minims of 5 per cent Phenol in Alcohol.

With the previous injection of Procain, the pain and burning is very much diminished, though there is some stinging and numbness following, even persisting to the next day.

Of course, it must not be forgotten that proper attention must be given to the general condition of the patient, proper elimination, rest, diet etc.

I usually stop all forms of opiates after the treatment as the patient is so much more comfortable, that there is no further use for pain relieving remedies, except in some very few cases.

Case No. 1 This is really the worst case of suffering from this condition I have ever observed.

Colored Female—37 years.

This patient was brought to my office supported by two persons, so weak that she could hardly walk, with the following history:—That for 8 weeks she had not been able to sleep without opiates of some kind, that she would doze off, and waken with screams from violent pain, that the opiates were becoming less and less effective, and that her sufferings were becoming unbearable.

Examination showed her to be very weak, not able to stand alone, pulse, 126, temperature 100 3-5, tongue heavily coated, foul breath, no appetite, nauseated, drowsy.

The left eyeball was tender on palpation, also the left lower jaw and chin, larynx, neck etc.

This pain was described as throbbing, getting worse at times. This condition following Dengue fever she stated.

She also complained of earache on the same side, with a very painful spot about 3 cm back of the ear.

Nose and throat was a little congested, and tonsils mildly infected. Transillumination negative.

Previous to that she had pains radiating down the neck into the shoulder and arm into the fingers, but that was now better.

What struck me as odd, was intense suffering in spite of all the opiates she had been taking.

I made an application of 20 per cent Solution of Cocain to the Spheno Palatine Ganglion through the nose, on the left side, the pain eased, and in about 30 minutes the pain was gone, and the patient smiling. She was sent home, went to bed, and told me on her return later that she had slept for 20 hours without waking and without nourishement, as she was too exhausted to awaken.

I had ordered all opiates stopped and gave her large doses of Magnesium Sulphate daily to bring on free elimination.

Thirty hours after the first treatment she again returned complaining of some soreness, some pain, and earache on the same side. I applied the same treatment as the day before, and got relief as on the previous day. Again returning on the following day with the same condition but not as severe, I then proceeded to inject the Ganglion with a Solution of Cocain and Alcohol through the Greater Palatine Foramen. After insertion of the needle for 35 mm. I slowly injected 10 minims of the solution. This was followed by some burning sensation which lasted a few minutes. I used 6 minims of grain alcohol, and 4 minims of 1 per cent Sol. of Cocain.

Two days later patient returned, and complained of some numbness about face and neck, but no more pain.

Three months after she had not had a return of the condition.

Case No. 2 This case is of interest because the attack I saw her in and one previous were diagnosed as Acute Mastoid, and treatment for that purpose.

This patient gave a history of fairly good health, but not very strong, and had been operated on 15 months before for Acute Appendix.

About one year previous had had a similar attack of severe pain in the ear and mastoid region running down the neck into the arm. Was treated for Mastoiditis with ice bags to Mastoid etc., and finally got over the attack which she said gradually wore off.

When I saw her she gave a history of having had an attack since 5 days, the same kind of pain and location as the pain a year before. This pain was very severe back of the Mastoid region, and in the ear, and running down the shoulder and neck, into the arm.

She had ice bags to the Mastoid region, and I was called to examine the ear. This I found perfectly normal in appearance and no indications

of Middle ear or Mastoid troubles. The right eye was red, free lacrymation, and the pain very marked in the neck and shoulder.

As I did not see the patient again, I did not have the opportunity to treat her, but I understand since then a surgeon operated upon her and removed the Gasserian Ganglion. This is merely hearsay however. She had a typical picture of Spheno-Palatine Ganglion Neuralgia.

I would be very glad to see this patient since the operation was done, and get more information.

Case No. 3 White Female, Age 29 years old. General condition was good, and seemed to be in perfect health, and gave no past history of interest.

About 4 days previous to me seeing her, she was taken with a very severe earache on the right side. Examination of the ear revealed same to be perfectly normal. Her teeth were all in good condition. Said she had developed a little cold a few days before. Cocain applied to the Spheno-Palatine Ganglion on the affected side, relieved the pain immediately.

She returned home, and having a recurrence came back, and then I proceeded to inject the ganglion as in the previous cases. She reported better for several days, and then disappeared and has not reported to me any more, though several months have elapsed.

Case No. 4 Colored Female Age 24. Came in and gave a history of pain of a month duration, worse at night, affecting top and left side of scalp, running to left eye with lacrimation and photophobia and injected conjunctiva on the same side, with teeth of both upper and lower jaw being affected. This pain radiated to the neck, shoulder and down the arm on the left side.

She gave a history of being healthy, no venereal disease of any kind, usual childhood diseases, had children and they were in good health.

Examination revealed chronic tonsils, septal spur left side, some dental caries, otherwise nothing of importance. She had taken drugs of all kinds, but had no relief. Cocainization of the Spheno-Palatine Ganglion left side, gave her complete relief in 10 to 15 minutes, which was lasting. I saw her several times in the next two weeks, and she had no recurrence.

In this case, I also stopped all forms of opiates, ordered free elimination, and moderate diet. This I think is just as important as the application.

Case No. 5 Colored Female 23 years. Married no children. Had lost some weight, was anemic and felt generally run down.

She gave a history of aches and pains running down the neck into the shoulder and arm, which she had felt for sometime, and was always worse at night. Her throat was in good condition, also her teeth. Her nose was somewhat blocked up on the left side with the middle Turbinate, which was on the same side that she complained of the pains, and on shrinking there was observed a small quantity of pus trickling from the middle meatus. The Naso Pharyngoscope showed this coming from the Ethmoids posteriorly and the Sphenoid, and on washing out the Sphenoid, some pus was found in the washings.

Cocain applied to the ganglion on this side relieved the pain, and after two more washings and applications the pain did not return, and she refused any surgical treatment.

This is clearly a case of inflammatory changes in the posterior Ethmoids and Sphenoid as being the cause.

Case No. 6*** Colored Female Age 24 years. Married. Gave a history of headaches for several weeks, all on right side, worse at night, diminishing toward morning. This pain she described as being in the eye ball, teeth, side of nose, ear, back of ear, neck, throat, shoulder. She also had pains in arm and forearm, but were now better, but only her arm felt numblike and dead. Pains nearly disappeared during the day, but never left her entirely.

Appetite was poor, bowels sluggish, had taken all kinds of headache medicines which only gave temporary relief, and had not consulted a physician until she came to my office. This presented a classical syndrome, and application of Cocain to the painful side, relieved her of the pain. She was sent home, all medication to relieve pain was stopped, and elimination ordered.

She was seen three times after this, with only partial return of the pain, and applications of cocain made each day and did not return after that, so the pain must have left her entirely.

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DISCUSSION

Dr. J. J. Shea, Memphis, Tenn.: The Spheno Palatine Ganglion Neuralgia patients make up the majority of the unsuccessful cases in rhinology. If we divide the headaches and neuralgias into two types according to their distribution, we will find that those contined to the lower half of the head are produced by the irritation of Meckel's ganglion or its branches. The patient comes to us seeking relief from a definite pain at some point and if we stop that pain the patient is satisfied and time will be allowed for further investigation into its cause. But if no relief is had, the patient becomes dissatisfied and the opportunity for further study of the case is lost. When localized pain without local inflammation is encountered, anesthesia of Meckel's ganglion should be performed. This will greatly aid in establishing the diagnosis. A complete nasal examination under the above circumstances requires a cocainization of the ganglion in order to establish a correct diagnosis. If the cocainization of this ganglion does not give temporary relief from the pain or headache, then sinus disease is not the cause of it and surgery on the sinuses will fail to relieve the pain.

The cocainization of this ganglion is necessary in all routine sinus examinations. If the gangtion is to be injected the first trial should be with a 2 per cent solution of novocain. If anesthesia is obtained, alcohol with 5 per cent phenol may then be injected. If the injection is into the fossa containing the ganglion the solution will remain in the tissues but if the solution is injected into a posterior ethmoid cell it will escape into the throat—so that the escape into the throat of the fluid after the injection may be taken as an indication that the injection was not into the ganglion. The symptoms are dependent upon the type of the fibres of distribution. The sen-

sory fibers will cause pain, at first being referred to the full distribution and later being localized to a single branch, i. e., a tooth, an eye, behind the ear or deep in the nasal cavity. The sympathetic fibers will cause vasomotor disturbances such as rhinitis and blockage of the Eustachian tube and with its connection with the carotid plexus, it is possible to explain many of our reflex phenomena, such as asthma of nasal origin. Through the trophic branch the growth and development of the sinuses can be arrested and it is our opinion that this is the case when infections of the sinuses produce such an arrest and as a result the sinuses remain infantile throughout life.

I prefer injections by the Sluder method as the ganglion is but 6 mm below the surface of the membrane while it is 35 mm away from the point of injection when the Palatine or Reaves method is used.

CLINICAL OBSERVATIONS OF THE PREVAILING GRIPPAL INFECTIONS AMONG INFANTS AND CHILDREN.*

MAUD LOEBER, M. D.,

J. E. POLLOCK, M. D.,

AND

F. M. DIRMANN, JR., M. D.

NEW ORLEANS

In presenting to you our observations we endeavor to give you a picture of the cases which we encountered, because they are not clearly la grippe as we are wont to see it, nor influenza as we recently had visit us, but are an entity not previously met with so commonly as has this infection, and not classified in the text books under this title.

We hope your discussion and observations will aid to elucidate and crystalize this particular form of grippe.

We noticed that the infection did not single out any particular group of children, neither age nor previous condition of health were contributory factors, that the disease manifested itself in five fairly distinct varieties, namely:

1. Those cases which have primarily the lesions and symptoms directed to the rhino pharynx.
2. Those cases which have primarily the lesions and symptoms in the trachea and upper respiratory tract.
3. Those primarily in the smaller tubes or lung tissue; broncho pneumonia.
4. Intestinal type.
5. Any combination of two or more of these varieties.

(1) Those cases which follow type 1 began with symptoms of ordinary coryza. The nasal discharge assuming a thin mucous character—frequent sneezing—a mild conjunctivitis, more frequently not conjunctivitis, but a red grippal throat—no exudate on tonsils, though the tonsils were red and slightly swollen, the pharynx however was much congested and presented an appearance of inflammation.

Chest and abdomen negative. The temperature ranged from 99° to 101.2° F.

The child's appetite was slightly impaired, digestion good. There was present a tight unproductive cough. The course of the disease was protracted and the child seemed apparently more ill than the physical findings and temperature would warrant. After several days the character of the nasal discharge became thicker and assumed a purulent character, the cough became somewhat improved and the characteristic feature of this disease manifested itself namely, without any apparent cause the train of symptoms returned and the child showed a relapse instead of the looked for convalescence and recovery. Two or more of the recurrences were likely to manifest themselves before complete recovery.

As with all grippal conditions one attack seemed to predispose to others, but as before mentioned this occurred in convalescence before the primary attack hid been completed.

(2) In type 2 the cases began with symptoms of tracheal cough and hoarseness, with the symptoms of the initial coryza minimized. In these cases, however, the throat showed the same redness that was so markedly shown in the type 1 cases. The character of throat that we are accustomed to designate as "grippal throat." The characteristic features in these cases was the fact that the cough, though progressive in character, was dry, explosive, paroxysmal, stimulating pertussis, did not as a rule progress to a true bronchitis or broncho pneumonia, the chest being remarkably clear throughout, despite the progressive hoarseness, approaching aphonia at times, and the distressing, exhausting cough. These cases also were accompanied with fever of a low grade.

The other symptoms relating to the digestive tract and other systems are the same as type 1. Again as in type 1, relapses were wont to occur just as one looked for convalescence. In both these types the weakness and loss of strength, vigor and pep were a notable feature of convalescence.

*Read before the Louisiana State Medical Society, Opelousas, April 22-24, 1924.

(3) In type 3 the initial symptoms of type 1 and 2 rapidly passed into a true bronchitis and broncho-pneumonia. The red throat persisting for some time even after the physical signs appeared in the chest, the dry irritating cough, added to the exhaustion of the little patient. As with ordinary broncho-pneumonia the course of the disease was protracted.

(4) In considering the fourth variety our attention is directed mainly to the intestinal tract.

The child has a grippal throat, red and inflamed, and may or may not have coryza, usually, however, there is a slight coryza, but the characteristic feature here is the symptom of diarrhea, the stools having a foul, putrefactive odor. This character of stool persists for approximately 48 hours, the odor disappears, but the watery stool with mucus and undigested food persists. Distention of the abdomen was of frequent occurrence in older children and the colicky pains were complained of.

Unlike the usual ileocolitis, the prostration is not in proportion to the physical findings for often the mucus is streaked with blood and the baby seems playful, appetite not disturbed and there is no vomiting. The usual temperature curve, however, persists.

(5) In type 5 the combinations make up the picture, two or more varieties being present in the case.

Complications and Sequelae

The most frequent complication was otitis the most pronounced and most frequently met with sequelae was the anemia and prostration, lack of initiative and buoyancy and the pristine vivacity of the healthy infant seemed to take quite a long time to regain.

Conclusion

We believe that we have recently met a new manifestation of grippe which exhibits 5 distinct varieties, as mentioned in the opening of our paper.

DISCUSSION

Dr. W. H. Seeman (New Orleans): I was very much interested in Dr. Loeber's classification. I have had a case this winter and have observed at least three cases of grippal throat in which the obstruction and interference with respiration became so severe as to justify tracheotomy. The tentative diagnosis in the case was diphtheria engrafted on a grippal base. The cultures from the throat were negative, and even after the tracheotomy had been done and material was obtained directly from the trachea, it remained negative for diphtheria. We find invariably in these cases the staphylococcus aureus very frequenlty associated with hemorrhagic streptococcus. But here were three cases that gave a typical picture of laryngeal diphtheria that were proven to be negative by repeated cultures.

I simply want to call your attention to the frequency of this complication.

Dr. Homer Dupuy (New Orleans): The trouble, type 1 is in the upper respiratory region. For instance, in that type much of the exasperating cough is due to what we might anatomically term a pharyngo-tracheal involvement and inflammation, and if you wish to allay the cough to some extent you must apply the treatment post nasally. There is a constant profuse dripping of secretions from the naso-pharyngeal region, and any treatment for the relief of that means applying it from the nasal side, therefore the head is thrown backward, and we find that adrenalin, 1 to 3,000 or 4,000, injected through the nostrils on both sides will tighten up these parts and greatly reduce this secretion. If adrenalin is not to be used, then possibly argyrol 10 per cent will work as well. I believe that much of the coughing can be greatly relieved in type 1 by treating the naso-pharynx.

Dr. E. L. Sanderson (Shreveport): I would like to ask the doctor in closing to give us the treatment. We have had two cases of this disease as she described it and I would like to know what her treatment is.

Dr. Maud Loeber (closing): As far as treatment is concerned, it was mostly symptomatic. We did not, as Dr. Dupuy suggested, use adrenalin, but we did use menthol with liquid albolene feeling we might get less tenacious mucus. That was what we used in the coryza. Later on when we got an irritating cough we used croup kettles with benzoin added to the menthol as an vapor inhalation in hot steam. For the broncho-pneumonia we relied practically on treatment with camphor stoups, feeling that in most infants we can give camphor by inhaling and get a better respiratory and cardiac effect than by giving it by mouth. Where the irritation was very severe we sometimes gave a sedative cough mixture.

In the diarrhoeas we used principally the Bulgaris bacillus to overcome the putrefaction, which was characterized by the odor of the stools. We were not fortunate enough to get complete analysis of all of our cases as to the bacteriological findings, and I feel that Dr. Seeman's contribution is of real value to the paper.

OSSIFYING SUBPERIOSTEAL HEMATOMA.*

HERMANN B. GESSNER, M. D.

NEW ORLEANS

Two cases are here reported because of the diagnostic interest and because of the few references found in a search of the literature.

The first case was that of a star football player, Albert D., who was kicked on the front of the left thigh in a practise game in November, 1909. He stayed through the game, limping and suffering severe pain. The knee was stiff and the seat of severe pain when attempts at flex-

*Read before the Orleans Parish Medical Society, May 12, 1924.

ion were made. At the end of five days the initial swelling had gone down, but there appeared "to be a solid mass in the muscle." The treatment consisted of massage, active and passive motion and baking. The pain diminished, but the stiffness in the knee persisted and the mass seemed to be getting harder and harder. When six months had passed the case came under the care of Dr. P. A. McIlhenny and the writer. At this time the diagnosis of myositis ossificans had been suggested. This was rejected because it was easy to grasp the quadriceps extensor mass and lift it clear of the hard bony mass (five inches by three inches) underneath. There was evidently no pathology in the muscle. Functional disturbance was due to the fact that flexion was closely limited by the extensor running over the bony prominence. An X-ray picture was taken, which on account of the lapse of time and lack of storage facilities is not available at present; the report of the radiologist is likewise not available. However, as the diagnosis on his Touro Infirmary record is "osteoma" that was probably the X-ray diagnosis.

May 31st, 1910, Dr. McIlhenny operated with my assistance. A longitudinal incision was made on the lateral surface of the femur, the periosteum was divided and the projecting mass of new bone easily chiseled off. Recovery was uneventful. After-treatment included active and passive motion and baking. The end result is best shown by the fact that in 1917 he was accepted by the army for aviation service. In February, 1923, nearly 13 years after the operation, the anatomical and functional results were excellent.

Our conclusion on discussing the case after operation was that the kick had caused a subperiosteal hemorrhage; the blood failed of absorption, was organized and permeated by neighboring bone cells, the final result being an ossifying subperiosteal hematoma.

The second case was of special interest from the functional viewpoint. Dan R., negro laborer, 40 years old, was admitted to the Charity Hospital, December 12th, 1922, with a diagnosis of periosteal sarcoma of the right femur, based on an X-ray picture. The mass was of the size of an orange, slightly tender, deep-seated, smooth, fixed to the bone; the soft parts moved freely over it. The situation was a serious one from the functional point of view, for he had had an amputation through the middle of the left thigh for injury. If the diagnosis was correct, amputation at the hip was indicated, as the hospital had then neither radium nor a deep X-ray machine. This amputation might end in death by shock; if it did not he would be left with a hip amputation on one side, a thigh amputation on the other. The history was that of an injury three months before, a piece of timber having struck him. The whole thigh was swollen and painful; swelling went down after a few days leaving a mass stationary in size but painful. It did not seem reasonable to expect a large sarcoma to have sprung up within three months after a single injury. A second picture was requested and the case brought to the attention of the director of the X-ray department, Dr. A. Granger. The excellent picture then taken was interpreted by him as showing a large ossifying hematoma of the femur (Fig. 1). Operation was performed December 28, 1922. Through a lateral incision over the right femur the mass was exposed and found attached to the femur by a narrow longitudinal base about two inches long; after division of the periosteum the mass was easily chiseled off. Recovery uneventful. Inquiry through the Social Service Department (Misses Nairne and Norman) elicited a personal report in May, 1924, that he is steadily at work and having no trouble.

Figure 1.

In both cases it was the femur which was involved; in both there was a history of trauma, of considerable pain and swelling, and of a firm mass remaining at the end of a week. The diagnosis was based on the clinical history, on palpation, and on the X-ray picture.

I am indebted to Dr. McIlhenny for permission to report the case of A. D.

DISCUSSION

Dr. O. C. Cassegrain: I am afraid Dr. Gessner

has been a little too modest in not taking proper credit for his diagnosis in the second case. I had the good fortune to see the case in the clinic. The thigh was a horrible thing to see—swollen, distended—and looked every bit like a case of sarcoma.

This brings out a wholesome lesson, the value of repeated X-ray examinations in doubtful cases. The first X-ray was interpreted as a sarcoma. It was not until several days later that the second picture was taken; if the doctor had accepted the first picture and amputated the thigh he would have done an unnecessary operation.

Dr. E. Denegre Martin: I would just like to ask the doctor if the growth was entirely subperiosteal?

Dr. Adolph Jacobs: I have nothing to add except that I want to congratulate Dr. Gessner for the good judgment he used in not accepting the X-ray diagnosis of sarcoma and amputating the thigh.

While the laboratory is of great aid and no physician should practice without this valuable adjunct, still entire reliance should not be placed upon it. A clear clinical analysis of a case as Dr. Gessner has shown in this case has saved this patient from being a sad cripple for the rest of his life.

Dr. H. B. Gessner (closing): I have nothing to add, but I do wish to give credit to the X-ray department for making the diagnosis clear in the second case. In teaching students I like to tell them not to rely too much on the laboratory. If you have read any articles lately by such men as Cushing you will find they believe there is a danger of over-emphasizing laboratory work. Cushing says that he is inclined to think, in teaching students, it might be well to give them two years of clinical work with an outline of the fundamental sciences and then to take them to the laboratory and teach them histology, X-ray, etc. I do not know whether he is really serious about that or not. I do not go as far as Dr. Cushing, but I do believe that there is a tendency to teach too much reliance on laboratory aids. Tulane is all right in that respect; our men get contact with patients as well as the laboratory work.

I wish to lay stress on the value of the X-ray in this case. The last picture was clear, and made the diagnosis.

ANASTOMOSIS OF THE SEVENTH AND ELEVENTH CRANIAL NERVES TO CORRECT FACIAL PARALYSIS.*

J. T. NIX, M. D.,

NEW ORLEANS.

Paralysis of the seventh cranial nerve causes a deformity more conspicuous, more disabling and more discomforting than that of any nerve of corresponding size in the entire body. The eye cannot close, but constantly weeps; the mouth dribbles saliva from the affected side—speech is interfered with, mastication impaired, the delicate shades of countenance are lost. Joy, happiness, sorrow, shock, surprise, all the emotions have for their common expression—the same blank stare.

How embarrassing or even how blighting to a future might such a condition be if it occurs at the bloom of youth or early adult life, and here it usually occurs.

The facial nerve is the motor nerve of almost all muscles of the head, except those of mastication and the muscles of the tongue. It leaves the cranium by passing

Fig. 1. Facial nerve paralysis before operation. Inability to close eye, blank expression of face.

through the internal auditory meatus with the auditory nerve, then it traverses the petrous portion of the temporal bone, lying in the facial canal or fallopian canal. Here it gives off several branches and leaves the skull from the stylo-mastoid foramen, emerging as one small nerve trunk. It describes an arch convexed inferiorly around the external acoustic meatus and traverses the substance of the parotid gland forming the parotid plexus. As close as possible to the stylo-mastoid foramen is the point of election where the nerve is divided for anastomosis.

The case which we present was absolutely unavoidable at the time. The patient was critically ill and a real, life-saving emergency operation had to be done even at the expense of the facial nerve.

The spinal accessory or eleventh cranial nerve is purely motor. It is formed by the union of fibres which take origin from the brain and spinal cord. It leaves the cranium through the jugular foramen and divides immediately into the internal ramus which blends with the vagus and an external ramus, the larger portion. This passes in front of the external jugular vein, then

*Read before the Louisiana State Medical Society, Opelousas, April 22-24, 1924.

backward, downward and laterally to the medial surface of the upper third of the sterno-cleido-mastoid muscle which it pierces. In its course to this point there are usually found several anastomosis with

Fig. 2. After operation, beginning return of muscle function.

the cervical nerves. At the point of entrance with the sterno-cleido-mastoid muscle is considered the best for anastomosis.

The hypoglossal nerve is very often considered as the nerve of choice for facial anastomosis, however, it was not used in our case for the following reasons:

In order to secure the best results, complete division of the hypoglossal is necessary. Implanting the distal cut end of the facial into the trunk of the hypoglossal or using a part of the hypoglossal nerve, reflected back, to anastomose with the facial, does not give the same result as when the entire twelfth nerve is used. Complete division of the hypoglossal nerve causes serious impairment in the function and use of the tongue, which represents a strong contra-indication.

After ten careful cadaveric dissections of the upper triangles of the neck with exposure of the facial, spinal accessory and hypoglossal nerves the long trapezius branch of the spinal accessory was selected to carry the central impulse. The site of entrance into the sterno-cleido-mastoid muscle was considered the point of election for division of the nerve. Here it is nearer the surface, and can be reflected upward to meet the facial nerve with ease. Division of the trapezius branch of the spinal accessory is not nearly so likely to cause annoyance as division of the twelfth nerve, and whatever disturbance of muscular function does follow can usually be corrected by muscle training. Operation: Begin the incision at external orifice of ear close to the mastoid bone and extend it downward two and one-half inches, following the anterior border of the sterno-cleido-mastoid muscle. Cut through the fascia and expose the parotid gland at the extreme upper end of incision. A small cut is now made into the posterior border of the parotid gland and by careful blunt dissection with a Mayo scissors the parenchyma of the gland is divided until a small silver white nerve is exposed, branching into the gland and taking origin as one trunk through a small orifice in the base of the skull—the stylo mastoid foramen. The nerve is now cut with a very sharp knife as near as possible to the stylo-mastoid foramen. Through the sheath of the distal end of nerve two small silk sutures are passed to act as guides until the union is made. The spinal accessory is now located beneath the deep fascia, directly below the transverse process of the atlas where it is covered by the posterior belly of the digastric muscle. Some authorities recommend division of this muscle in order to obtain better exposure, but this is hardly ever necessary. The nerve is now followed downward to its point of entrance into the sterno-cleido-mastoid muscle. The main branch pierces the muscle, continuing to supply the trapezius. Other small branches are given off proximal to this, anastomos-

Fig. 3. After operation, complete return of facial expression. 75% return muscle function.

ing with branches from the cervical nerves. The trapezius branch is now supported and divided just within the substance of the sterno-cleido-mastoid muscle. Bridles of silk are now passed through the nerve sheath as with the facial. In dividing both nerves, a very sharp knife was used and great care exercised so as not to crush the nerve ends as this would materially retard or possibly prevent restoration of nerve continuity.

By cutting the facial close to the stylo-mastoid foramen and the eleventh nerve at the entrance of the trapezius branch into the sterno-mastoid muscle, we are able to approximate the proximal end of the eleventh to the distal end of the seventh without the slightest tension, almost securing redundancy. Very fine sutures of double O chromic catgut were now passed interruptedly through the nerve sheaths and the opposing neurilemmas firmly approximated. In order to additionally secure the anastomosis, a small strip of sterno-mastoid muscle was cut from below upward, leaving the upper end attached. This strip of muscle 1-4 inch by 1 1-2 inches was wrapped over and sutured around the site of neurorrhaphy. A few interrupted catgut sutures were now passed through the fascia and the skin incision closed with dermal.

Post Operative Course

For two weeks following the operation the head was bandaged and fixed in the position of torticollis tilted to the side of the operation. This was done to relax all muscular structures in neck and relieve any possible strain on sutures. Patient made an uneventful recovery, getting up in a rolling chair on the fourth day and leaving the institution eight days after the operation. Nitrous Oxide-Oxygen-Ether anesthesia was used. Operation lasted one hour and 35 minutes. The first evidence of motion appeared about four weeks post operative, there being some slight movement possible at the angle of the mouth. Motion came back slowly at first, but after the fourth month, progress was very rapid. Complete and independent closure of the affected eye was one of the last muscle functions to return. At the end of one year nearly every muscle action of the normal side could be reproduced on the reconstructed one, there being a slight difference in degree of contraction in favor of the normal. The muscles work in unison and there is very little deformity. The patient has on several occasions been embarrassed by the hand suddenly giving away while holding a glass of water or other weight. This, however, has been very exceptional.

Extensive mastoid disease with Mastoidectomy and facial paralysis—occurred September 20, 1919. Neurorrhaphy, June 29, 1920, nine months and nine days after.

Subsequent to the first Mastoidectomy the ear never stopped discharging pus, and in January, 1922, the condition again became very acute, requiring a second Mastoid operation. The following notes by operator will explain findings at the time.

"In former operation it is evident that a modified radical operation was performed, but no flap was made. First operation followed by facial paralysis—Posterior auditory canal wall found removed down to aditus ad antrum, but ossicles and drum were not removed. Following first operation the posterior wound continued to discharge and finally there was a small slough of bone extended. The patient began to have dizzy spells associated with severe nausea and vomiting and a reopening of the wound was advised. At this operation, necrotic bone was found in mastoid region and the dura found exposed in epi-tympanic region about size of a 10-cent piece with pus formation, extra dural abscess.

Second Operation

A complete radical mastoid was done and a plastic flap of external canal was made by Pansy method. During the operation the site of destruction of facial nerve was found at the aditus. The proximal end of nerve only could be seen as the distal end had retracted in the fallopian canal. Direct neurorrhaphy, even if the field were not infected, would have been impossible, as the distal end of nerve could not be located.

Immediately following this operation the patient developed a diffuse cellulitis, adenitis and myositis of that side of the head. The nerve anastomosis was involved in the inflammatory process and muscle function was greatly impaired for several weeks following. With the subsidence of the inflammation, however, function rapidly returned.

At the present time four years after the neurorrhaphy—Mrs. M. has been restored to the beauty and charm that she previously enjoyed. There is still some difference between the two sides of the face, due to the slight variance in intensity of muscle action. This, however, is not in the least displeasing, but by many of her new acquaintances, is considered an act of

coquetry or affectation, as several have advised her secretly and in all sincerity.

Unfortunately we can only report one case operated, for though there have been many who appeared at the clinic for advice and treatment, in each instance a minimum time of three years had elapsed since the paralysis occurred and we did not believe operation could relieve.

Conclusion

Operative correction of facial paralysis is a very practical procedure, which can, without great difficulty, be accomplished by nerve anastomosis. Facial paralysis is a common and often unavoidable sequence or complication of many cases of extensive mastoid disease or life-saving radical mastoid operations. It is neither discrediting nor reflecting of the slightest demerit when such paralysis follows surgery of skilled hands. However it is most unscientific, grossly unfair and surgically unpardonable when the family physician or consulting specialist permit it to exist and go uncorrected until the time limit for repair has passed.

DISCUSSION

Dr. C. A. Gardiner (Sunset): Would a year be too long to wait?

Dr. J. T. Nix (closing): No. Two years is too long, but I think a year and a half is within the limits.

I am sorry there was no discussion of this paper. It is not because there are not enough cases of facial paralysis going around Louisiana. I have two slides that show the difference between a patient operated and one not operated. I have seen at least five cases in the last three years showing the most terrible deformity from facial paralysis. I repeat that facial paralysis may occur in the practice of any general practitioner, and it is absolutely unavoidable when it does occur. The operation gives the patient a chance to get well.

EDMOND SOUCHON, M. D.,
1842-1924

New Orleans
Medical and Surgical Journal
Established 1844

Published by the Louisiana State Medical Society under the jurisdiction of the following-named Journal Committee.

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Material for publication should be received not later than the twentieth of the month preceding publication. Orders for reprints must be sent in duplicate when returning galley proof.

THE JOURNAL *does not hold itself responsible for statements made by any contributor.*

Communications should be addressed to: New Orleans Medical and Surgical Journal, 1551 Canal Street, New Orleans, La.

IS LEPROSY CURABLE?

The leprosy problem, like the poor, we still have with us. Medical men generally know little of its early symptoms. Disfigured faces, mutilated hands and feet, loathsome ulcers—these are some of its features familiar to all. That in some cases, however, the symptoms are quite trivial, causing no more inconvenience than a few patches of ring-worm and never develop the disease to sufficient degree to be diagnosed during a life time, is a point which has never been sufficiently stressed.

Muir (1) has recently reported that six hundred cases of leprosy have been observed in Calcutta during the past three and one-half years and of this number he has been able to tabulate accurate data on two hundred and three. Of the latter group forty-three have lost all signs of the disease. According to Muir leprosy is a self-healing disease. When the disease has burned itself out after many years of suffering, the end lesions are generally trophic ones due to fibrous contraction in the nerve trunks causing destruction of nerve fibres. Such are the cases that crowd the leper asylums and settlements, no longer able to make a livelihood due to their deformities. At this stage careful search will generally fail to detect any lepra bacilli. Recovery of complete sensation under treatment is not always possible for obvious reasons. Muir speaks with enthusiasm of the esters of hydrocarpus, chaulmoogra and other oils in the treatment of these cases. In his series under treatment the proportion is sixteen without active signs to seven with them. He holds that with sufficient vigilance by the medical profession leprosy can be totally eradicated.

(1) Muir, E.: Is Leprosy Curable? Indian Med. Gaz., LIX, 297 (June), 1924.

EPONYMS OF DERMATOLOGY

In a review of Herman Goodman's article in the Archives of Dermatology one finds a number of physicians with diseases of the skin named after them, who have been in one way or another associated with American medicine, and more particularly Southern American medicine. We have chosen several excerpts from Goodman's paper with this in view.

Engman's Disease (Infectious eczematoid dermatitis.) Martin Feeney Engman was born in New Orleans, La., U. S. A., in 1868. He is a well known dermatologist in St. Louis, where he is clinical professor of dermatology, Washington University Medical School, and Senior Dermatologist to the Barnard Free Skin and Cancer Hospital, which he founded. He is a member of the American Dermatological Association, and was its president, 1919-20. The paper describing the disease which bears his name was, "Derm. infectiosa eczematoides," Amer. Med., 1902: 4,769. Engman also made a report on Lichen planus annularis in the J. Cutan. Dis., 1901: 19,209.

He also made an interesting record of a "Psoriasis Tree," J. Cutan, Dis., 1913: 31,559; as well as a study of "The pathogenesis of placental syphilis," J. A. M. A., 1912: 58, 1415. Many other papers have been published with Mook as co-author. Engman and Mook also have a valuable collection of clinical photographs of dermatologic interest.

Gilchrist's Disease (Blastomycosis.)—Thomas Casper Gilchrist was born in England, June 15, 1862. He came to America in 1890. He is a member of the American Dermatological Association, and was its president for 1908-1909. He is professor of dermatology at John Hopkins' University. The disease which bears his name was studied and reported as a "Case of

Blastomycetic Dermatitis in Man," John Hopkins' Hospital Reports, 1896: 1,269, 7 plates; ibid. 1904: 15, 56; and Brit. Med. Jour., 1602: 2, 1321. The name of Oidium Gilchrist has been given to one form of the parasite. Gilchrist has made a study of the acne bacillus, J. H. H. Reports, 1905: 9,420; the contents of the bullae of pemhigus, Trans. Am. Derm. Assn., 1899: p. 96; study of mast cells, J. H. H. Bull., 1896: 7,140; and the streptococci in the vesicles of impetigo, etc., Trans. Am. Derm. Assn., 1900, p. 87. Gilchrist reported an excess of indican in patients with urticaria, Am. Derm. Assn., 1899. He did some work on Urticaria factitia, J. Cutan. Dis., 1908: 23,122. He reported an unusual type of case of Pityriasis rubra followed by peripheral gangrene of the right hand and left foot in the Brit. Med. Jour., for Oct. 6, 1906. In 1920, Gilchrist published a later edition of his "Outline of Common Skin Diseases including Eruptive Fevers."

Bannister's Disease (Edema Angioneuroticum.)—Henry Martyn Bannister was born July 25, 1844. He was graduated from the National Medical College of Washington, D. C., in 1871. He was on the Geological Survey of the territories, including Alaska. He practiced in Chicago. He was the first to report angioneurotic edema in the Jour. Nerv. and Mental Dis., 1894: 2; 627-631. Bannister was co-author of a "Practical Manual of Mental Medicine." He was Editor of the Chicago Journal of Nervous and Mental Diseases, and a member of the editorial staff of the Journal of the American Medical Association. He died May 1, 1920.

Schenck's Disease (Sporotrichosis.)—Benjamin R. Scnenck reported, "On refractory subcutaneous abscesses caused by a fungus possibly related to sporotrichosis" in the J. H. H. Bull., 1898, 9,286.

Hyde's Disease (Prurigo nodularis.)—James Nevins Hyde was born in Norwich, Conn., U. S. A., on June 21, 1840. He studied medicine at College of Physicians and Surgeons, N. Y., and saw service during the Civil War, and later. He was the pioneer dermatologist of Chicago, having begun the practice of the specialty there in 1873. He was a member of many dermatological societies and one of the founders of the American Dermatological Association, and its third president, as well as president in 1896. He was a teacher of no mean ability. He was the author of over 100 special articles. His treatise on Diseases of the Skin, 1883, has gone through eight editions.

The condition to which Hyde's name has become attached was first described by Hardaway, Arch Derm. 1880: 6,161. Hyde gave the disease its name. For a review of this disease, see Zeisler, J. Cutan. Dis. Nov. 1912.

Hyde died on Sept. 6, 1910.

Grindon's Disease (Peculiar affection of the hair follicle; Ecbolic folliculitis.)—Joseph Grindon was born Aug. 20, 1858. He is a prominent dermatologist and professor of dermatology and syphilology in St. Louis. The disease which he described and to which his name is attached was described in J. Cutan. Dis., 1897: 15,256.

Grindon reported the cutaneous phenomenon of typhoid fever in 1893. He made an admirable study of Recurrent Zoster, J. Cutan. Dis., 1895: 13,191, and 252. Grindon delivered a series of three lectures on medical history from Hippocrates to Harvey in 1907. He published Manual of Diseases of the Skin, 1902; and Cutaneous Therapeutics, 1907 (with Hardaway).

EDMOND SOUCHON

On August 5, 1924, death claimed one of our most beloved and respected confreres, for Edmond Souchon achieved honors as physician, surgeon, medical educator and author. A native of Louisiana, having been born in Opelousas in 1842, he received his medical training in Paris. Shortly after his graduation, J. Marion Sims visited Paris to demonstrate his operation for vesicovaginal fistula, and as Sims could speak no French the honor fell to young Souchon to serve as interpreter. Returning to New Orleans he began to practice medicine and remained actively engaged in professional work for nearly sixty years. In 1872 Dr. Souchon was appointed demonstrator of anatomy at Tulane, becoming professor of anatomy and clinical surgery in 1885. In 1892 he was asked to design the plans and supervise the construction of the Richardson Memorial Building, one of the units of the Tulane Medical School. He served for many years as member of the board of administrators of the Charity Hospital; acted as president of the Louisiana State Board of Health under three governors. In 1908 he retired from his chair in Tulane to devote his full time to the founding of an anatomical museum at Tulane, now known as the Souchon Museum of Anatomy, and without doubt one of the best in the world. Dr. Souchon served as president of the Orleans Parish Medical Society, vice president American Medical Association, vice president Ameri-

can Surgical Association, was a founder of the Southern Surgical and Gynecological Association, and a fellow of the American Society of Anatomists. He served two terms on the board of governors of the Boston Club.

He had the distinction of being elected an honorary fellow of the American College of Surgeons, an eminence accorded to but few. Among the more important contributions to medical literature made by Dr. Souchon might be mentioned his "Philophic Anatomy of the Liver," "Aneurisms of the Arch of the Aorta" and "Plea for Reform in Medical and University Education." His contributions to the literature on anatomy, surgery and sanitation were many. He was inventor of the Souchon anesthetizer.

All who knew Edmond Souchon loved him. The thousands of physicians throughout the South, who, at one time sat at his feet, while he imparted to them their knowledge of anatomy or surgery, mourn deeply his loss.

FEE SCHEDULES

The subject of fees! Always interesting. Frequently requests are made by medical societies and individuals, for copies of the fee schedule used by members of the local medical society. Fortunately for the medical profession of New Orleans which serves a city who population is one third negro, another third dependent on "benefit societies" for medicine and treatment, the Medical Society has never adopted a schedule of fees such as other medical societies in many sections of the country have done. This relates particularly to charges for house calls and office consultations. Many factors influence medical charges; the patients economic condition is of first importance. On the other hand the physician is entitled to full consideration for his services.

Fees for house calls, as a rule, should be in excess of office charges. Night calls more than day visits. Distance to be traveled, length of time spent at the bedside, character of service rendered, and the type of case treated, should all be included in determining the charge.

Treatment of infected cases, involving greater responsibility and some personal risk to the attendant should command a larger fee.

Usually the first house visit requires more time than succeeding visits, and charges should be increased accordingly.

Finally the personal qualifications of the physician, his training and experience in dealing with the particular type of case, should merit for him greater compensation. A flexible scale excepting routine work, will meet all conditions, assuring to the patient the fullest and fairest treatment, and to the doctor a competence commensurate with his time, service, and skill. Medical fees should not be standardized, and popular impression to the contrary should be corrected.

WE THANK YOU

The Journal Committee acknowledges, with appreciation, the many complimentary communications and editorials on the recent improvements of the Journal.

For the profession of Louisiana and Mississippi, in the spirit of true fraternalism, we accept with feelings of gratification and pride the words of commendation. We extend the hand of fellowship and ask help as we advance step by step in the footsteps of our fathers and predecessors who have fought the battles of truth against ignorance and superstition.

We wish especially to acknowledge the editorial in the *Texas Journal of Medicine* by our true and loyal friend, Dr. Holman Taylor, Editor-in-Chief.

The Committee felt it timely to broaden the influence and enlarge the scope of the Journal. With the assistance of our Mississippi confreres we now feel that the "rainbow of progress" gives promise of an era bright with the prophecies of grand development in medical research.

"There are great truths that pitch their shining tents
Outside our walls, and though but dimly seen
In the gray dawn, they will be manifest
When the light widens into perfect day."

Minutes of the Woman's Auxiliary to the Mississippi State Medical Association 1924

The first session of the Executive Board of the Woman's Auxiliary to the Mississippi State Medical Association met at the Edwards Hotel, Jackson, Miss., at 2:30 p. m. May 13, 1924. Mrs. D. J. Williams, president, in the chair. The roll call showed four members of the board present. Distinguished visitors present were: Mrs. S. C. Red of Houston, Tex., President of the National Auxiliary to the American Medical Association, and Mrs. Seale Harris of Birmingham, Vice President of the National Auxiliary, and President of the Woman's State Auxiliary to the Alabama State Medical Association.

A motion was made and carried that the incoming president be empowered to appoint for the coming year a corresponding secretary in her own vicinity. It was moved and seconded that Mrs. James M. Acker, Jr., act as recording secretary in the absence of Mrs. T. E. Ross, Jr.

After discussion, it was decided that there should be two kinds of membership, namely the regular and the associate members. In counties where there is no local organization, wives may become State members with all the privileges of the state organization by paying $1 state dues. These members will be known as associate members and as local organizations are formed in their respective localities, they will be allowed to become regular members by joining the same and paying an additional twenty-five (25) cents, making the total dues for regular members $1.25. At this point Mrs. S. C. Red and Mrs. Seale Harris gave interesting and instructive talks showing the importance of the Auxiliary and how auxiliary members could work with the Federated Clubs in the state along health lines. Mrs. Red read a report of the Committee on Program and Activities as adopted by the 12th Division Texas Women in 1923.

The Executive Committee then adjourned to meet at 9:30 a. m. Wednesday.

A general meeting was held at 9:30 a. m. May 14, 1924, at the City Auditorium. The meeting was called to order by the president. The Lord's Prayer was repeated as an invocation. The first order of business was the appointing of a nominating committee, consisting of—

Mrs. R. C. Elmore, Durant.
Mrs. G. W. Robertson, Magnolia.
Mrs. A. M. Doty, Lexington.

A Courtesy Committee consisting of—
Mrs. W. H. Parsons, Vicksburg.
Mrs. S. H. Hairston, Meridian.
Mrs. J. M. Acker, Aberdeen.

The report of the President was received and a rising vote of thanks was given Mrs. Williams.

The reports of the Recording Secretary, the Corresponding Secretary and Treasurer were received. The Treasurer's report showed a balance of $11.25.

Mrs. Hairston reported the organization of the Lauderdale County Auxiliary. Mrs. R. C. Elmore, President of the Homes County Auxiliary, made an interesting report, four members of this organization were present. The report from Harrison-Stone County Auxiliary was read by the President.

Mrs. S. C. Red, President of the Woman's Auxiliary of the American Medical Association gave a talk on the work of the Councilors, and told how to stimulate enthusiasm among members; she gave a very interesting account of the first organization and its growth.

Mrs. Seale Harris gave a report of the organization's work in Alabama.

Four new Councilors were appointed—

Mrs. W. H. Frizell, Councilor for the 8th District.

Mrs. W. G. Gill, Councilor for the 6th District.

Mrs. E. R. McLean, Councilor for the 1st District.

Mrs. H. F. Garrison, Councilor for 5th District.

Mrs. Williams and Mrs. Harris emphasized the importance of Public Health work to be done by the doctors' wives in connection with Federated club work.

There being no further business the meeting adjourned to meet at 1 p. m. at the Bon Ton Cafe, at which time and place the meeting was called to order by Mrs. S. W. Johnston, Vice President; Mrs. Red and Mrs. Harris were guests of honor.

Mrs. D. J. Williams delivered the President's address, following which Dr. Olin West, Secretary of the American Medical Association, was introduced and made an interesting talk. Mrs. Red was the next speaker and told of the work of the Woman's Auxiliary to the American Medical Association and the plans for the Aux-

iliary meeting at Chicago in June. Mrs. Harris was next introduced and gave an account of the meeting of the Southern Branch of the Auxiliary at Washington, and the plans for the coming meeting of the Southern Branch of the Woman's Auxiliary to be held during the meeting of the Southern Medical Association at New Orleans, La., in November.

The Nominating Committee reported as follows:

Mrs. D. J. Williams, President.

Mrs. S. H. Hairston, First Vice President and President Elect.

Mrs. S. W. Johnston, Second Vice President.

Mrs. J. M. Acker, Jr., Recording Secretary.

Mrs. D. W. McCalip, Treasurer.

There being no other nominations, the above candidates were declared elected.

Delegates to the Auxiliary of the American Medical Association were elected as follows:

Mrs. H. R. Shands, Jackson.

Mrs. E. H. Galloway, Jackson.

Alternates:

Mrs. N. C. Womack, Jackson.

Mrs. N. R. Currie, Jackson.

The Courtesy Committee rendered the following report:

Be it resolved by the Woman's Auxiliary to the Mississippi State Medical Association, that the thanks of the organization are most heartily extended to the ladies of Jackson, and the local Entertainment Committee for their cordial hospitality, and to Mrs. Red, the National President, for her delightful and instructive address and also to Mrs. Seale Harris, for her interest and assistance in perfecting our organization.

(Signed) Mrs. W. H. Parsons, Chairman.
Mrs. S. H. Hairston.
Mrs. J. M. Acker, Jr.

There being no other business the Woman's Auxiliary to the Mississippi State Medical Association adjourned to meet in 1925 at Biloxi, Miss.

(Signed) Mrs. James M. Acker, Jr.
Recording Secretary.

Officers for the year 1924-25 are as follows:

President—Mrs. D. J. Williams, Gulfport. Miss.

First Vice President—Mrs. S. H. Hairston, Meridian, Miss.

Second Vice President—Mrs. S. W. Johnston, Vicksburg, Miss.

Recording Secretary—Mrs. J. M. Acker, Jr., Aberdeen, Miss.

Corresponding Secretary—Dr. Margaret Caraway, Gulfport, Miss.

Treasurer—Mrs. W. D. McCalip, Yazoo City, Miss.

Councilors

1st District—Mrs. E. R. McLean, Cleveland, Miss.

2nd District—Mrs. B. S. Guyton, Oxford, Miss.

3rd District—.....

4th District—Mrs. T. W. Holmes, Winona, Miss.

5th District—Mrs. H. F. Garrison, Jackson, Miss.

6th District—Mrs. W. G. Gill, Newton, Miss.

7th District—Mrs. R. H. Foster, Laurel, Miss.

8th District—Mrs. W. H. Frizell, Brookhaven, Miss.

9th District—Mrs. S. C. Culpepper, Wiggins, Miss.

Chairman Public Health—Mrs. Henry Boswell, Sanatorium, Miss.

Chairman Program and Activities—Mrs. R. C. Elmore, Durant, Miss.

The following ladies joined the State Auxiliary following the adoption of a motion that any one living in unorganized counties may become a member of the State Auxiliary upon payment of $1 per year dues—they becoming members of their local organization as soon as an organization is perfected:

Mrs. G. W. Robertson, Magnolia, Miss.
Mrs. W. H. Frizell, Brookhaven, Miss.
Mrs. G. C. Terrell, Prentiss, Miss.
Mrs. W. B. Harrison, Belzoni, Miss.
Mrs. H. G. Williams, Prentiss, Miss.
Mrs. S. W. Johnston, Vicksburg, Miss.
Mrs. H. H. Haralson, Vicksburg, Miss.
Mrs. H. F. Garrison, Jackson, Miss.
Mrs. Henry Boswell, Sanatorium, Miss.
Mrs. Henry Blount, Bassfield, Miss.
Mrs. J. M. Acker, Jr., Aberdeen, Miss.

Address of President, Woman's Auxiliary

Mrs. D. J. Williams: In assuming the duties of your State President a year ago,, I felt keenly my inability to carry on—indeed I knew better than any of you that I was in the kindergarten class and it would take application and study to pass that grade in one year.

We all realize, as wives of physicians, that we are overshadowed by husbands who are more or less prominent and active in their communities, and we may have lost our identity to a certain extent. However, I see such wonderful possibilities in this organization that I have, as a whole, endorsed it after becoming more familiar with its aims. Am very sure every woman here will feel the same.

No woman's organization has higher and more altruistic aims than this one. In it we find the incomparable pleasure of helping to carry on the aims of the body of men we have placed on our highest pedestal.

Increased understanding of and sympathy with our husband's work, together with helping to promote acquaintanceship and harmony among doctor's families, is part of the great aim of our organization. As we look to the advancement of health and education, which is the paramount object of the medical profession, we are looking directly into the dynamic powerful forces that rule or ruin our homes.

We, among the enlightened women of our state, do not need to be told of the difference between education and ignorance, and that of health and disease. Women may flatter themselves as organizers, and argue that by working through woman's organizations they get so much more accomplished, and some even say that the creating of a common machine is exasperating, as men are not efficient organizers. But, while we are flattering ouselves, let us be honest and acknowledge that woman's efficiency as an organizer has not resulted in co-ordinating the public activities of men and women. We want to improve human relations, and it can be done only by the co-ordination of men and women in public affairs. Let us not allow our intelligent and public spirited men remain as outsiders to any organization work that we as intelligent and public-spirited women see it our duty and privilege to undertake. It should be the duty of the wife of every member of the Medical Association to carry on the campaign for health and education, whether a member of this organization or not. Not only a duty but a privilege that thousands of women in other organizations are attempting to carry on without the direct support from a body of men such as we will receive, as our men realize more and more that our interests are mutual, and that by organization, we may further these interests to an extent impossible to attain by working individually.

Understanding, co-operation, friendship, unity and harmony will follow quickly upon the heels of co-ordinating common interests. It has been proven that it is a very stupid politician who ignores women's organizations, as men up to the present time have thought of them in terms of mystery, if they thought at all. I have come to feel that there has been an unsuspected weakness in the organizations made up of women when it could remain so long a mystery. Let us lay our cards on the table, face upward, and say to our men, "Here we are, to help, not only in our homes, but to be used by you to help you, and ourselves socially, morally, mentally and (under our breath) financially." I add financially, not in a mercenary sense, but too often do we come face to face with the financial question—too often are we forced to give up, gracefully, greatly desired and wholly deserved things because of the fact that many of our husbands' patients, indebted to us, are flying about in new cars every year—while we thank fate for our husband's flivver. It's the only source of locomotion we have, some of us, and I say "We" because once in a while it is convenient for him to take us. I believe that the more interest we manifest the more our husbands will be encouraged in making collections, in which as we know some of them to be very lax.

However, let us not pity ourselves as being the slaving, self-sacrificing part of our family, for ten chances to one, the husband and father have had disappointments and sacrifices heaped upon him, that were it not for the optimistic and cheerful word that only you and I can offer, I dare say he would often flounder in a hazy sea of pessimism.

The age has come during our lifetime when women's opinions are sought for. We are no longer embarassed by being placed in the category of the imbecile or spoiled child, but at times I fear there is a disposition on the part of a body of women to be swayed beyond their best judgment when enthusiasm, or the reverse, dissension arises. While we are not claiming that "our men" never lose their heads, those of us who have "listened in" at men's meetings, have noted with admiration, the usually cool and deliberate discussions without undue demonstration. We are oftimes prone to speak hastily or discreditably, thereby greatly lessening our power for good at home or abroad. We are by nature conceited enough to hail with a certain degree of elation, the asking of our opinion. We believe that we are naturally endowed with an instinct which acts as a guiding force. By careful and prayerful study of conditions which naturally arise in every home and community, we should be, and are, a potent factor in creating and disposing of every undertaking. Because I believe that every woman is instinctively good, I further believe in her powerful force for good.

It is too often the case that women do not know just how to expedite their affairs

in their homes in order that they may widen the scope of their activities. We have not, modernly speaking, learned to budget our times in such a way that the results are always as we feel they should be, compared with the amount of thought and energy expended. It is, therefore, with concerted action, found only in organized efforts, that the results we are looking forward to may be ours.

Probably a majority of those present are more or less identified with other women's organizations and feel that their time outside of their home is fully taken up. By studying the aims of our organization which is intended to be extended, through the wives of the doctors to the various women's organizations, we will find innumerable phases of club work, especially in health and sanitation, education and child welfare, as correlating nicely with these organizations.

As stated before, let us keep this thought, WE have the guidance and co-operation of the strongest body of men's organization in the state and the nation. I feel we would be unworthy of our position in our communities should we fail to take advantage of this unusual opportunity.

As the center of these two organizations, I would suggest that we stress higher ideals in health and education that within each auxiliary a strong working committee be appointed to co-operate with the board of health and education and the men's and women's clubs of our respective community. We were all pleased with the idealism of the young girls, winning recently, the prizes offered by *The Times-Picayune* the essay on "How the people of the state, through their state and local government, can best help themselves to safer, happier and more prosperous lives." And especially were we impressed with the one whose keynotes were education, understanding and co-operation. As mature women and mothers, the duty of furthering the ideals of our children is put squarely up to us. I know you will not be "weighted in the balance and found waiting."

In conclusion, let me urge you not to lose sight of the necessity of social intercourse as so wisely suggested by the organizers of our organization. While some few medical men take time to mingle a bit socially, it has been my observation that, as a whole, they are the most devoted to their profession of any of the professional men. It was through love and a desire to help him that we begun, even before the honeymoon was over, of relieving him of everything we could in order that he might have more time for study and practice. I know scores of doctors' wives who have dangled on the telephone wires for the past fifteen years or more, and if it is suggested that a short vacation be taken by one or both, a wail goes up that it can't be done, and one would think that the whole world depended upon the tired little wife, and equally tired husband, grinding away. Upon the advent of an organization in which both are interested, it seems to me a natural result that that same little wife will tactfully press upon her husband the advantages and pleasures of going together to state or larger medical meetings; especially after there is an auxiliary in their county and the wives have provided a social luncheon, which is very apt to bring that unity and harmony among doctors' families.

So now, at the end of our first year, I feel that we have a much clearer conception of the possibilities of our organization and that by the end of another year we will have increased greatly in membership and understanding, and incidentally increased our husband's confidence in our ability to "put over" the claims of his organization.

MEDICAL ECONOMICS

Chas. A. Bahn, M. D., Department Editor.

The germ of success is not in you if you cannot save a part of your income, paraphrased James J. Hill's reply to a young man who inquired about the essentials of success. Mr. Hill's idea was, of course, that a person who is so little interested in the future as to be unwilling to save a small part of present earnings in order to take advantage of future opportunities and better provide for old age and other future obligations, would probably never grow sufficiently, mentally and financially, to be classed with those who have really gotten the best out of themselves; which is what success means.

Mr. Hill was right. But, as we apply his remark to ourselves the first questions which present themselves, are; how much should I save, and what should I do with this amount, every dollar of which, means doing without something that is wanted or perhaps needed. The cost of living is high, social position must be maintained, obligations must be met, illness or other unexpected cause for expense has dimininshed my savings, and perhaps my expense will be less and my income greater next year when it will be easier to begin saving. These are a few of the thoughts which have already occured to you.

They may all be true, but don't forget, that in medical practice income is limited by the amount of service that can be rendered in an hour, and the remuneration obtained therefor; by the number of working hours in a day; by the number of working days in a year; and by the number of working years in a life. On the basis of an eight hour working day with an allowance of twenty-five workings days per year for vacation and illness, there are approximately sixteen hundred working hours in a year available for the direct examination and treatment of patients. Based on available information, the average physician receives about forty cents net out of each dollar that he earns. About fifteen per cent of his efforts are devoted to the poor, to members of the medical nursing, and other professions, and others who obtain his services without charge. Another fifteen per cent of his efforts are charged but not collected. The average cost of medical practice including automobile and other equipment maintenance ownership and depreciation, etc., is about thirty per cent of gross earnings; so that the earned dollar shrinks to a net forty cents.

Assuming that a doctor produces on an average one dollars worth of service hourly, he would produce sixteen hundred dollars worth in a year, as there are sixteen hundred working hours yearly. Of this he would receive net, approximately six hundred dollars, as he receives about forty per cent of every dollar that he earns. Likewise if he produced an average of ten dollars worth of service hourly, his production would be worth sixteen thousand dollars, of which he would receive approximately six thousand dollars net, that is, after all attendant expenses had been paid. The relation between production and net returns is practically the same in medical practice for large and small incomes.

Based on the law of averages, your income will begin to decline before you are fifty-five years of age, which means that unless you have saved enough to largely sustain yourself by that time, that your remaining years will probably be spent in relative poverty. Three thousand dollars per year is not an excessive amount on which to live, yet it represents at 5 1-2 per cent interest approximately fifty-four thousand dollars in savings; which however, means less than a hundred and twenty-five dollars monthly saved over twenty years, if invested and compounded at five and a half per cent.

Do not lose sight of the fact that if you cannot live within your present income, that you will probably do no better if your income were doubled, because your expense would be proportionately increased.

As physicians, our income is derived only from knowledge and service. Unless we accumulate sufficient of a more material

character during our productive years, future comforts will be rather limited when the public have ceased to purchase our services, as ultimately they must.

Let us suppose for the moment that your income was reduced to the point where you had to spend less. You would probably be just as happy as you are today, and as you were before your income reached its present level. Expense is based on an estimate of income and if this estimate is a poor or careless one, as it is apt to be if every available cent is spent without thought of tomorrow, you probably will not get the most happiness directly and indirectly out of your efforts; besides, you will accumulate financial obligations which rapidly increase with time and which must be met by you or your family. In this case, your wife will be deprived of the comforts which she has a right to expect, and your children will be deprived of an education, which means a fair start in the world.

If you save too great a part of your earnings, your growth will be stunted and your development narrowed, while if you save too little, your last years are apt to be spent in the poor house. Between these two extremes there is a fairly broad path in which we should travel.

The statistical information which follows this article is copied from a booklet "The Way To Wealth," and is published by the kind permission of Wm. Compton and Co., of New Orleans. Read this table and then read it again. It will give you an idea of what those who have thought long and carefully on this subject consider the most profitable average distribution of a given income, also the accumulated results of a reasonable saving, if invested and compounded at an accepted rate which involves the maximum safety. The information is based on net income and does not consider gross earnings. The retained copy of your last federal income tax return should afford an accurate idea of your net income. It is possible that the information given in the following table may be advantageously modified to meet your individual case, but probably not.

Unfortunately the average doctor, because of his defective training in economic common sense, partly because of his early financial difficulties, and partly because of the impression that he receives from a few doctors in his community, who are apparently wallowing in the lap of luxury, but who are in reality often living beyond their means; gets the idea that on or about a certain day, glory will infold him, gold will pour into his lap, and some unseen force will provide for him and his. In reality, this is just the opposite of what usually really happens. The doctor who succeeds in saving enough to take care of himself and his family nearly always does so by regularly laying aside a small part of his earnings, usually dating from the early days of his practice, and by investing this small part regularly, with or without the assistance of others, depending upon his sense of values, his judgment and inclination; and at a rate not exceeding that generally accepted as a fair return for the use of money. That doctor is sure to spend his declining years in comfort, afford his wife and children reasonable comforts in case of death and give his children a reasonable education.

These are all that a doctor has a right to expect from his professional efforts.

The reason that most savings are lost and do not accomplish their purpose is because the saver wants something for nothing, or what is practically the same thing, wants more than the use of his money and the knowledge and effort invested with it, reasonably entitled him. Because of the deprivation which saving represents, it is only natural to want as great a return from our efforts as possible. When this desire for a greater return than the use of our effort and money entitle us, stifles our common sense; We lose sight of the risks involved and speculation supersedes investment. The stage is now set for the high speed salesman, and savings are soon exchanged for glittering promises which, of course, are seldom or never realized. Money has a rent value just as real estate. No one will pay you more for your money than it could be gotten for elsewhere, which in figures generally means not over 6 per cent. Bankers, investment security dealers, and others are professionals in the loaning and investing of money, just as you are a professional in medicine. It would require almost as much effort for you to learn all of the details of their life's work as it would for them to learn yours. These intricate details, however, are seldom necessary where the investor is satisfied with a reasonable return. The correctness of any statement given you about an investment can usually be easily verified by some reputable person in the same line of business, by some disinterested friend of good business judgment, or by your banker. It is far from my opinion that the average banker represents the first and last word of financial acumen, nor that he is a patron saint of doctors, widows, orphans and

others who usually know nothing about looking after their own business affairs, but I do believe that the average banker knows the difference between a good and a bad investment for doctors, widows, orphans, etc., and that it is to his advantage to give you dependable advice.

Having presented a reasonably simple plan by which the average physician can profitably dispose of his income, our next problem is the disposition of that part of income classed as accumulation. This means the amount invested in bonds, stock, home and furnishings, real estate, and anything else, which can be ultimately converted into money, to the extent of its cash value at some future time.

Our objects in saving are usually (1) to establish a fund, the income from which will, at about the age of fifty-five, provide reasonable comfort for our wives and ourselves during the remainder of our lives and which will properly educate our children; (2) to establish a similar fund to provide for those left behind in case of the family bread winner's death; or disability before the saving program is completed. Let us set this sum at $3,000 per year, which means at 5 1-2 per cent interest, the accumulation of about $55,000 and sufficient insurance to take its place in case of death or disability prior to the age of about fifty-five.

Compensation laws base their estimates of the value of a human life at between three and four times the individual's net income. According to this estimate, a physician should carry insurance to the extent of between three and four times his average yearly net income.

Owing to the limited space at our disposal in this issue we will be obliged to continue this subject next month.

Inquiries were not answered in this issue because there were none to answer. Within the next month we hope to have more, in which case we will begin this part of the work in the following issue.

We appreciate very much the interest shown in the last instalment, especially in view of its puzzling presentation. The printer apparently thought it would be more easily digested if chopped into small pieces.

Again we say this is your page, conducted to help you as you want to be helped. We want you to feel that we are interested in receiving inquiries or problems which relate to more and better medical service to the public, and the greatest practical benefit to the doctor for the effort expended.

Address communications to Dr. Chas. A. Bahn, 1551 Canal street, New Orleans, La.

NET INCOME BUDGET PLAN

	ACCUMULATION			LIVING EXPENSES						WELFARE	
Income	%	Insurance	Investment	Speculative Fund	%	Food	Shelter	Clothes	Operating Maintenance	%	Education Recreation
$ 2,500	10	$ 150	$ 100	$ 0	78	$ 650	$ 540	$ 400	$ 360	12	$ 300
3,000	15	225	225	0	71	700	600	425	400	14	425
3,500	15	250	275	0	71	750	650	525	550	14	500
4,000	15	275	325	0	70	850	720	600	650	15	580
5,000	20	400	600	0	65	875	840	675	860	15	750
7,500	27	600	1,000	400	57	1,200	1,200	800	1,100	16	1,200
*10,000	30	900	1,500	600	54	1,300	1,400	1,000	1,700	16	1,600
*12,000	42	1,000	3,000	1,000	42	1,300	1,400	1,000	1,800	16	2,000
*15,000	47	1,500	4,200	1,400	38	1,400	1,500	1,000	1,800	15	2,200
*20,000	50	1,700	5,000	3,300	35	2,000	1,800	1,200	2,000	15	3,000
*25,000	50	1,800	6,700	4,000	35	2,300	2,200	1,400	2,800	15	3,800
*30,000	50	1,900	7,500	5,600	34	2,500	2,500	1,500	3,500	16	5,000
*40,000	50	2,000	10,000	8,000	30	2,800	3,000	2,000	4,200	20	8,000
*50,000	50	2,500	12,500	10,000	28	3,000	3,600	2,400	5,000	22	11,000

*Net after Federal Income Tax.

INVESTMENT CHART

Showing how large a fortune is accumulated in any given number of years by investing each six months, at 5½%, HALF the sum indicated for ANNUAL investment, for any specific income, under Investment column of Working Plan.

Income	10 Years	15 Years	20 Years	25 Years	30 Years	35 Years
$ 2,500	$ 1,345.89	$ 2,347.56	$ 3,661.40	$ 5,384.72	$ 7,645.07	$ 10,609.86
3,000	3,028.25	5,282.01	8,238.15	12,115.57	17,201.41	23,872.24
3,500	3,701.20	6,455.79	10,068.85	14,807.93	21,023.94	29,177.18
4,000	4,374.14	7,629.57	11,899.55	17,500.28	24,846.48	34,482.12
5,000	8,075.34	14,085.36	21,968.40	32,308.20	45,870.42	63,659.15
7,500	13,458.92	23,475.60	36,609.01	53,847.01	76,450.69	106,098.84
*10,000	20,188.38	35,213.40	54,921.02	80,770.51	114,676.04	159,148.26
*12,000	40,376.76	70,426.80	109,842.03	161,541.02	229,352.08	318,296.52
*15,000	56,527.44	98,597.54	153,778.84	226,157.44	321,092.91	445,615.13
*20,000	67,294.60	117,378.00	183,070.05	269,235.05	382,253.45	530,494.20
*25,000	90,174.73	157,286.55	245,313.80	360,774.97	512,219.66	710,862.23
*30,000	100,941.86	176,067.00	274,605.08	403,852.50	573,380.20	795,741.30
*40,000	134,589.20	234,756.00	366,090.10	538,470.10	764,506.90	1,060,988.40
*50,000	168,236.44	293,445.06	457,675.13	673,087.63	955,633.70	1,326,235.57

Working Plan used by permission of the Babson Statistical Organization.

NEWS AND COMMENT

Lucien A. Ledoux, M. D., Department Editor

"Every man owes some of his time to the upbuilding of the profession to which he belongs."—(Theodore Roosevelt)

Bulletin of the Shreveport Medical Society, July, 1924.

July Scientific program by Tri-State Clinic. August: Social meeting, no scientific program.

July Subject: The Female Pelvis.

Surgery of the Tubes and Ovaries, Dr. L. H. Pirkle.

Caesarian Section, Dr. T. E. Williams.

Female Pelvis from a Urological Standpoint, Dr. E. W. Harris.

Extra-Pelvis Symtoms due to Pelvis Pathology, Dr. H. L. Green.

Toxemias of Pregnancy, Dr. W. B. Heidorn.

Ectopic Gestation, Dr. S. W. Boyce.

The above papers will be limited to ten minutes with discussions limited to five minutes.

Charity Hospital, June 3, 1924.

The Shreveport Medical Society was called to order by acting president I. Henry Smith at 8:15 P. M. Minutes of last meeting were read and approved.

Dr. Spencer reported $150.40 in the bank and one hundred members as having paid 1924 dues. Inasmuch as he is leaving the city, Dr. Spencer offered his resignation as treasurer. With considerable regret the Society accepted Dr. Spencer's resignation. There were no committee reports.

Scientific Program.

This part of the program was put on by the Ouachita Parish Medical Society.

Dr. J. B. Vaughn talked about Hypertension. Discussion by Drs. Herold, Knighton, Lloyd, Bodenheimer, Boaz, R. C. Young, Sanderson and closed by Dr. Vaughn.

Dr. George Wright talked abut Acute Hematogenous Osteomyclitis. Discussion by Drs. Spencer, Caldwell, Abramson and closed by Dr. Wright.

These subjects were interesting and well presented and called forth lively discussion.

After a business session the Society was adjourned, Refreshments to follow.

R. T. Lucas,
Secretary-Treasurer.

Louisiana Railway Surgeons

There will be a meeting of the Louisiana Railway Surgeons Association in Alexandria, on September 13th. You are urgently requested to attend, as matters of vital interest to the organization will be considered.

Lafourche Valley Medical Society

Lafourche Valley Medical Society will have its regular meeting on August 13th, 1924, 6:00 P. M. Dr. S. M. D. Clark, surgeon of New Orleans, and also member of the Lafourche Valley Society will read papers.

Third Congressional District

The Third Congressional District Medical Society had a wonderful meeting in Patterson, La., on July 22nd. Drs. Eshleman and McIlhenny of New Orleans gave interesting scientific talks, and the discussions were interesting. An enjoyable boat ride on Grand Lake with Spaghetti supper served while out on the lake were the features of a wonderful day.

F. T. Gouaux,
Councilor.

St. Tammany Parish Medical Society

The St. Tammany Parish Medical Society held its regular monthly meeting on Friday, June 13th, at Mandeville.

The meeting resulted in a round table talk with the following results:

Interesting discussion of the Eruptive Fevers, led by Dr. J. F. Buquoi; condemnation of some of the present-day methods of the Louisiana State Board of Health; Memoralizing Governor Fuqua to keep politics out of the state medical institutions, with special reference to the state institutions for mental diseases, and strongly recommending and endorsing Dr. Evans, that present very efficient medical superintendent, for retention or reappointment; opposition to the "Chiropractic" bill now before the Legislature, as vicious and a menace to an unsuspecting and gullible public, and petitioning our State Senator and Representative to work and vote against it.

Tangipahoa Medical Society

The meeting of the Tangipahoa Medical Society was held at the home of Dr. E. M. Robards, Monday night with 23 doctors present.

The large spacious porch of the doctor's residence was used for the business meeting, which was addressed by Dr. Glen Smith

of Amite, and Dr. A. W. Shaw of the United States Malaria Control Department.

At the conclusion of the business meeting, the visiting medical men were ushered into the large dining room of Dr. Robards' residence, where dinner was served.

The home had been artistically decorated for the occasion. Among those present were Doctors J. E. Kennon, Kentwood; Isham, Roseland; Glen J. Smith, J. H. Beatty, Alfred L. Lewis, T. C. Lewis, Amite; L. L. Ricks, R. W. Travis, W. T. Newman, Anderson, Independence; Rex Singletary, S. S. Anderson, Eddie McGhee, J. A. Newman, Newsom, Hammond; J. A. Thames, Natalbany; W. G. Bowman, E. J. Kevlin, F. D. Travis, A. M. Robards and Mr. L. E. Carruth, Ponchatoula.

Washington Parish Medical Society

June 26th, -1924, the Washington Parish Medical Society held its regular monthly session at the Pine Tree Inn, Bogalusa, La. Luncheon was served at 8:00 P. M., and after luncheon the regular program was taken up.

Program.

Ileo Colitis, by Dr. Chas. J. Bloom, New Orleans.

After the reading of this paper, there was an "hour of questioning," round table discussion.

Louisiana Helps Mothers and Babies

Louisiana has just decided to accept the provisions of the Federal Maternity and Infancy Act, bringing the total of States Cooperating with the National Government in work for mothers and babies to 41. Louisiana has never before accepted the provisions of the act. In 1922 the State legislature met and failed to accept. In 1923 the State Senate agreed but the House refused.

Married: Doctor Fayette Clay Ewing to Rowena Annette Clark, on Saturday, the second of August, 1924, in Princeton, Illinois.

Returned and resumed practice: Dr. Edmond L. Faust, 2708 Octavia Street; office, 427 Physicians & Surgeons Building.

Removals

Dr. B. C. Fry, from Jennings, Louisiana, to 616 Baker Avenue, Bell, California.

Drs. Herold, Dickson, and Sentell, from First National Bank Building, Shreveport, to New North Louisiana Sanitarium, Shreveport, La.

Drs. Rougon, Stamper, Paine, and R. C. Young to the Ricou-Brewster Building, Shreveport, La.

Campaign Against Rickets

Codliver oil was found helpful in preventing rickets among Italian babies of the Mulberry district in New York City. In this district the city bureau of child hygiene and the Association for Improving the Condition of the Poor, found that fully one-fourth of the children of preschool age were suffering orthopedic defects, due largely to rickets in babyhood. One hundred and fifty babies between three and nine months old were brought to a clinic and given follow-up care by its nurses. An effort was made to see that these babies received cod liver oil regularly during a period of four months. At the end of the experiment, it was found that 71 precent of the babies who took the oil regularly showed no signs of rickets, whereas only 30 per cent of the babies who did not receive the oil were free from the disease.

Wisconsin was admitted to the United States birth registration area in 1918. This year the United States Bureau of the Census has, for the first time, checked up Wisconsin's accuracy, and found that Wisconsin is registering 83.4 percent of all her babies. The requirement for admission to the birth registration area is a 90 percent perfect record.

The creation of a Medical Corps within the U. S. Veterans Bureau, through an Act of Congress, was recommended to Director Frank T. Hines, today, by the Medical Council in session at the Veterans Bureau.

This step was taken because of a belief that a permanent qualified personnel is highly essential to the best operation of the Bureau. The formation of a Medical Corps would give security of position to the doctors and assurance of permanent personnel to the Bureau.

The occurence of 4 cases of abortion complicated by hemolytic streptoccemia with recovery under the use of Antistreptococcic Serum on the Gynecologic service of the Presbyterian Hospital, Philadelphia during the past year, seemed of sufficient interest to warrant reporting them.

Faulty lighting and poor eyesight "are today the major factors in one out of every eight accidents," it is asserted by R. E. Simpson, engineer of the Travelers Insur-

ance Company, Hartford, Conn., in a report to the Eye Sight Conservation Council of America, which is carrying on a nation-wide campaign for better vision in education and industry. Fully 66 percent of American workers have defects of vision, according to the report.

The Tuberculosis and Public Health Association of Louisiana adopted its charter and perfected its organization on July 23rd.

This organization owes its existence to the efforts of Dr. C. V. Unsworth, the president of the Louisiana State Medical Society and the Executive Committee, which endorsed the work. Dr. W. H. Seemann is president of the new organization.

The intent of the organizers is that this association should fulfill a function in promoting general health, centralizing their efforts in the beginning principally on tuberculosis.

It is the idea to work in close co-operation with the Louisiana State Medical Society and the constituted authorities, and it is felt that this association can be of tremendous benefit to organized medicine on account of the opportunity afforded through it to bring to the public correct views about medical and health matters.

The Price Reductions on Iletin (Insulin, Lilly)

In May, 1922 when Eli Lilly and Company were accorded the privilege of co-operating with the Insulin Committee of the University of Toronto, in developing processes for refining and manufacturing Insulin on a large scale, they had constantly in view the desirability of ultimately placing it in the hands of the physician at one cent per unit.

August 6, 1922 Eli Lilly and Company commenced to supply Iletin (Insulin, Lilly) to a few leading specialists selected by the Insulin Committee of the University of Toronto, for experimental work. Soon they were furnishing large quantities without cost to clinicians and investigators. January 19, 1923 they began to sell limited quantities at 5 cents per unit to physicians. Since that time the need for costly experimental work has diminished. Substantial savings also have been effected in other ways.

Within the period of these reductions, the strength of the unit of Iletin (Insulin, Lilly) has been increased approximately forty percent. Taking this into account, Iletin now costs the physician only about one seventh as much as originally.

In some districts of the Belgian Congo ther are more deaths than births, and in some places in this territory one-half of the children die before they reach the age of two. Reports indicating conditions such as these have led the National Children's Bureau of Belgium to appropriate, for the first time, 50,000 francs for a campaign against infant mortality in the Congo.

Publications Received

P. Blakiston's Son & Co., Philadelphia: "Toxicology or the Effects of Poisons," by Frank P. Underhill, Ph. D.

William Wood and Company, New York: "Diseases of the Eye," by Charles H. May, M. D.

Columbia University Press: "Mind and Medicine," by Thomas W. Salmon, M. D.

Government Printing Office, Washington: The Medical Department of the United States Army in the World War. Vol. XI, Surgery. Part two.

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